

Dr. Kevin E. McCluney

Curriculum Vitae

Associate Professor
Department of Biological Sciences
Bowling Green State University

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

POSITIONS/AFFILIATIONS

- Bowling Green State University, Department of Biological Sciences (January '14 – May '20)
 - **Associate Professor**, May '20 – Present
 - Assistant Professor, January '14 – May '20
 - Member of The Center for Great Lakes and Watershed Studies
 - Honors College Affiliated Faculty
- **“Adapting to City Life” Research Theme Member**, Arizona State University, Central Arizona Phoenix Long-term Ecological Research programs (Spring 2015-Present)
- **Post-doctoral Research 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 Research 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)

PUBLICATIONS

Total publications: 34	* = undergraduate student
Peer-reviewed journal articles: 28	** = graduate student
Mean (\pm SE) impact factor: 4.8 (\pm 0.6)	† = major mentorship
h-index: 16	IF = Impact Factor
i-10 index: 20	
Total citations: 1034	
Peer-reviewed publications since arriving at BGSU: 19	
Manuscripts nearing publication: 8	

Published Journal Articles

1. Marshall, M.**† and **K. E. McCluney**. *In Press*. Effects of experimental caffeine addition on stream biofilms, macroinvertebrates, and emergent insects. *River Research and Applications* [IF = 2.4]
2. Becker, J. E.**†, N. Mirochnitchenko*†, H. Ingram*†, A. Everett*†, and **K. E. McCluney**. 2021. Water-seeking behavior among terrestrial arthropods and mollusks in a cool mesic region: spatial and temporal patterns. *PLOS ONE* 16 (11), e0260070 [IF = 3.2]
3. Patrick, C., **K. E. McCluney**, A. Ruhi, A. Gregory, J. Sabo, and J. Thorp. 2021. Multi-scale biodiversity drives stability in macrosystems. *Frontiers in Ecology and the Environment*: 19 (1), 47-56. [IF = 9.3; special issue on Macrosystems]
4. Becker, J. E.**† and **K. E. McCluney**. 2021. Urbanization-driven climate change increases invertebrate lipid demand, relative to protein—a response to dehydration. *Functional Ecology*: 35 (2), 411-419. [IF = 4.4]
5. Marshall, M.**† and **K. E. McCluney**. 2021. Mixtures of co-occurring wastewater chemicals in freshwater systems across the continental US. *Environmental Pollution*: 268, 115793. [IF = 6.8]
6. Lindsey-Robbins J. **, A. Vazquez-Ortega, **K. McCluney**, and S. L. Pelini. 2019. Effects of Detritivores on Nutrient Dynamics and Corn Biomass in Mesocosms. *Insects*: 10(12): 453. Doi: 10.3390/insects10120453 [IF = 2.1]
7. Burdine, J.**† and **K. E. McCluney**. 2019. Interactive effects of urbanization and local habitat characteristics influence bee communities and flower visitation rates. *Oecologia*. doi: 10.1007/s00442-019-04416-x [IF = 3.0]
8. Leinbach, I.**, **K. E. McCluney**, and J. L. Sabo. 2019. Predator water balance alters intraguild predation in a streamside food web. *Ecology*: e02635. [IF = 4.6; corresponding author; summary in the *Journal of Experimental Biology* and a blog]

9. Burdine, J.**† and **K. E. McCluney**. 2019. Differential sensitivity of bees to urbanization-driven changes in body temperature and water content. *Scientific Reports*: 9: 1643. [IF = 4.6; summary in BGSU News]
10. Burdine, J**†, E. Plummer*, M. Seidel**†, and **K. E. McCluney**. 2018. Mass-length relationships for 3 bee species in northwest Ohio. *The Ohio Journal of Science*: 118: 31-33. [IF = NA]
11. **McCluney, K. E.**, T. George*†, 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]
12. Lagucki E.*, J. Burdine**†, and **K. E. McCluney**. 2017. Urbanization reduces abundance of pollinator taxa in a medium-sized city. *PeerJ* 5: e3620. [IF = 2.2]
13. **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]
14. **McCluney, K. E.**, J. Burdine**†, 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]
15. **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; cited in the Fourth National Climate Assessment]
16. **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]
17. 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]
18. 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 = 10.9]
19. **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 = 10.9; Part of a special issue on macrosystems ecology]
20. 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]
21. 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]
22. **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 = 10.3]
23. **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]
 24. **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]
 25. **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; *Science Editor's Choice*]
 26. 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]
 27. **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]
 28. 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. Kinsman-Costello, L., K. Fussell, C. Winslow, J. Kerns, S. Newell, T. Bridgeman, R. Becker, J. Chaffin, K. Doro, L. Johnson, G. Liu, **K. McCluney**, H. Michaels, R. Midden, S. Qian, R. Mendonca, N. Wright. 2021. H2Ohio Wetland Monitoring Program Monitoring Plan. Lake Erie and Aquatic Research Network (LEARN) for the Ohio Department of Natural Resources (ODNR). Columbus, OH, USA. 114 pp
2. **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]
3. **McCluney, K. E.** 2013. Water wings. *Cactus Wrendition* (Maricopa Audobon Society Newsletter).
<http://www.maricopaaudubon.org/Wrendition%20Winter%202013.pdf> [pgs. 12-13]
4. **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 16th, 2011 and received over 600 “likes” on facebook]
5. **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. [Dissertation]
6. 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

Total funding awarded: ~ \$10.6M combined, ~\$1.1M to McCluney (26 awards)

Funding while at BGSU: ~ \$9.5M combined, ~ \$969K to McCluney (12 awards)

Larger Awards (>\$5k)

1. Martin, J, L. Johnson, S. Culman, J. Hood, M. Kalcic, L. Kinsman-Costello, G. LaBarge, **K. McCluney**, B. Roe. A. Vazquez-Ortega, M. Weintraub, R. Wilson. *Recommended for funding. NRCS-RCPP-AFA: Pilot Watershed Project in the Western Lake Erie Basin (OH)*. \$6.8M awarded; \$19.4M total project cost (~\$686k to BGSU; ~\$201k to McCluney)
2. **McCluney, K. E.** and H. Michaels. 2020-2023. **H2Ohio Wetland Monitoring Program/ODNR/LEARN: H2Ohio Wetland Monitoring Program – Kevin McCluney**. \$279.6k (~\$260k to McCluney) [Notes: our team focuses on vegetation; 10+ years funding expected]
3. Neves, K., **K.E. McCluney**, C. Ward, H. Michaels, J. Kershaw, J. Meyer, F. Weisstein. 2020-2023. **NRCS, USDA: Aquaponics on the Edge: Coupling aquaponics to tile drainage systems for nutrient recapture and revenue generation**. ~\$144.5k (~\$3k to McCluney)
4. **McCluney K. E.**, E. Youngsteadt, and C. Penick. 2020-2024. **National Institute of Food and Agriculture, USDA: Where is pollination in peril? Evaluating climate risks to wild and managed bees and pollination services across the US**. ~\$430k (~\$197k to McCluney).
5. **McCluney, K. E.**, L. Stevenson, T. Worst, T. Davis. 2020-2022. **Ohio Sea Grant: Variation in contaminant concentrations in wastewater and in biota of streams of NW Ohio**. \$120k (~\$43k to McCluney).
6. Vazquez-Ortega, A., S. Pelini, Z. Xu, V. Phuntumart, **K. E. McCluney**. 2020-2022. **Ohio Sea Grant: Dredged material blended with organic rich sources to amend farm soils**. \$120k (~\$10k to McCluney).
7. Thorp, J., C. Patrick, J. D. Hogan, **K. E. McCluney**. 2020-2023. **Macrosystems Biology, National Science Foundation: Teleconnections among Great Plains NEON sites by wind and wing**. ~\$81k subaward from ~\$780k grant total, + \$10k REU supplement.
8. **McCluney K. E.** 2019-2020. **Planning Grant, Great Lakes Protection Fund: \$6k**. Sub-award from Diesch, B., Confesor, R., A. Vazquez-Ortega, **K. E. McCluney**, L. Stevenson, T. Guo. **Great Lakes Protection Fund: Smart2Genius: Catalyzing Farmer Adoption of Strategic Best Practices**. \$6k subaward from \$200k grant total.
9. **McCluney K. E.** 2018-2019. **Building Strength, BGSU: Disentangling pollinator food web responses to shifts in temperature and moisture associated with climate change**. ~\$10k.
10. **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.
11. **McCluney K. E.** 2016-2018. **Ohio Department of Higher Education, Harmful Algal Blooms Program: \$62.8k**. Sub-award from Johnson L., **K. E. McCluney**, W. R. Midden, P. Mouser, J. Martin, R. Confesor. **Ohio Department of Higher Education, Harmful**

- Algal Blooms Program:** Determining sources of phosphorus to western Lake Erie from field to lake. \$199k.
12. **McCluney K. E.** 2015-2017. **Ohio Board Of Regents and Ohio State University, Harmful Algal Blooms Program:** 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, Harmful Algal Blooms Program:** Identifying the best strategy to reduce phosphorus loads to Lake Erie from agricultural watersheds. \$451.5k.
 13. 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.]
 14. 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.]
 15. **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.
 16. 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.
 17. **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 (≤\$5k)

1. **McCluney, K.E.** Spring '21. **Faculty Recognition Award, Center for Faculty Excellence, BGSU.** Identified by a graduating senior as someone who made a difference.
2. **McCluney, K.E.** Spring '19. **Faculty Recognition Award, Center for Faculty Excellence, BGSU.** Identified by a graduating senior as someone who made a difference.
3. **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.
4. **McCluney, K.E.** April '10. **Service Award, Graduate and Professional Student Association, ASU.** Funding: \$0.25k.
5. **McCluney, K.E.** Summer '06 - Summer '09. **Travel Grants, School of Life Sciences and Graduate and Professional Student Association, ASU:** Funding: \$2k.
6. **McCluney, K.E.** Spring '08. **Citizen Scholar Award, School of Life Sciences, ASU** Funding: \$4.5k

7. **McCluney, K.E.** Spring '06. **Best Student Presentation Award, AZ/NM Wildlife Society and Fisheries Society Joint Meeting** Funding: \$0.1k
8. **McCluney, K.E.** Summer '05. **Dissertation Research Grant, Brian Daniel Corrigan Foundation, through ASU Foundation.** Funding: \$5k.
9. **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. Buchanan, J. Spring '21. **Barbara Long Master's Award**, BGSU. \$1.5k
2. Paull, R. Spring '19. **Barbara Long Master's Award**, BGSU. \$1k
3. Seidel, M. Spring '18. **Sigma Xi Grant.** Funding: \$0.9k
4. Burdine, J. Spring '18. **Oman Scholarship**, BGSU. \$1k
5. Marshall, M. Spring '18. **Oman Scholarship**, BGSU. \$1k
6. Burdine, J. Summer '16. **Annie's Scholarship.** \$6k
7. Mirochnitchenko, N. Spring '15. **Glass Award**, BGSU.

TEACHING

- Bowling Green State University, **Instructor of Record** (2014-Present)
 - **Concepts in Biology I** (90-150 students)
 - Substantially revised to include modern evidence-based practices and undergraduate learning assistants
 - **Invertebrate Biology** (10-15 students)
 - Redesigned course, from scratch, to become project-based and incorporate other evidence-based teaching practices
 - **Isotope Biology** (~12 students; New Grad/Undergrad Course)
 - Created course from scratch, using evidence-based practices
 - **Ecology for Teaching Professionals** (Online Graduate Course)
 - Created course from scratch, using evidence-based practices
 - **Urban Ecology** graduate seminar (5 students)
 - Read and discussed a new urban ecology text book
 - **Professional Development** graduate seminar (~20 students)
 - Facilitated readings, discussions, application material feedback, and mock interviews for a variety of different career pathways
 - **"Ecobreak"** (~10-20 students)
 - Organized this weekly seminar for graduate students and faculty to gather and provide research feedback. Taught presentation design skills.
- Arizona State University, **Teaching Assistant** (2003-2009)
 - **Introductory Biology for Non-majors Lab** (~25 students)
 - **Introductory Biology for Majors Lab** (~25 students)
 - **Ecology Lab** (~20 students)
 - Designed course from scratch with help of instructor of record
 - **Biometry Lab** (~20 students)
- Guest Lectures
 - **Environmental Communication**, BGSU, 2019
 - **Dietetics Intern Students**, BGSU, 2019

- **Introduction to Environmental Studies**, ENVS1010, BGSU (2x), 2015
- Freshwater conservation challenges. **Ecosystem Restoration and Management** (80 students), ASU, Tempe, AZ. Spring 2013.
- Multi-factor fixed and mixed effects models. **Biometry**, ASU, Tempe, AZ. Fall 2012.
- Population Ecology. **Sustainable Ecosystems** (120 students), ASU, Tempe, AZ. Spring 2010.
- Ecological entomology. **Ecology Lab**, ASU, Tempe, AZ. Spring 2010.
- Water as ecological infrastructure. **Water Sustainability**, ASU, Tempe, AZ. September 2009.
- Multiple Comparisons in ANOVA (parametric and non-parametric). **Biometry**, ASU, Tempe, AZ. Fall 2008.
- Community Embeddedness. **ASU 101**, ASU, Tempe, AZ. Fall 2007.
- General Linear Models. **Biometry**, ASU, Tempe, AZ. Fall 2004.

MENTORING/SUPERVISION

(* = primary mentorship, ^H = honors thesis)

• Post-graduates

- Research Coordinators (Full-time Administrative Staff)
 - Dr. Lauren Brown (2021-)
 - Ewan Isherwood (2021-)

• Graduate students

○ Primary Research Advisor

- **Current (6)**: Jacob Buchanan (PhD; 2019-), Alessia Saul (MS; 2019-), Jonathan Brokaw (MS; 2020-), Caroline Barth (MS; co-advised with Angelica Vazquez-Ortega; 2021-), Mica Rumbach (MS; 2021-), Toby Shaya (MS; 2021-), Bridget Harter (MS; 2022-)
- **Graduated (8)**:
 - *PhD*: Melanie Marshall (2019; currently TTF at Wright State Lake Campus in OH); Justin Burdine (2019; currently TTF faculty at Cornerstone in MI)
 - *MS*: Rachel Paull (2020; currently with Ecoanalysts, Inc.), Margaret Duffy (2020; currently at USDA ARS in MT), John Woloschuk (2019; Currently a Crew Leader at Penn State), Melissa Seidel (2019; currently Environmental Consultant at Davey Resource Group); Gabrielle Metzner (2018; currently at Keiser and Associates in MI); Jamie Becker (2017; currently an ORISE EPA Fellow)

○ Committee Member

- **Current (4)**: Kelly Russo-Petrick (PhD), Katie Ware (MS), Nate Stott (PhD), Brian Okwiri (PhD)
- **Graduated (18)**: Ian Clifton (PhD, Univ. of Toledo), Eric Line (MS), Tyler Sloan (MS), Meigan Day (MS), Audrey Maran (PhD), Amanda Martin (PhD), Erica Forstater (MS), Josie Lindsey-Robbins (MS), Eric Hibbets (MS), Haley Meek (MS), 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 (7):** Emily Fargo*, Kaitlyn Niek*, Gabriella Muller*, Ashlia Toles, Cami Kadel, Alaina Evinger, Connor McHugh
 - **Graduated (16):** Ally Morris, Jenna Ward*, Rafael Castillo, Daniel Clark*^H, Jordan Davidson, Jordan Gessner, Savanna Brown, Jamie Hawkins*, Neal Kolonay* (currently MS student at LSU), Lana Neff* (currently intern at the GA aquarium), Kaleigh Obrock (currently working at Nature's Nursery), Erin Plummer, Ashley Everett*^H (currently enrolled in dental program at OSU), Andrea Fisher (currently in graduate program at USF), Nadya Mirochnitchenko*^H (currently working for UNL after completing MS there), Haley Ingram*^H (currently in law school at OSU), Matt Zach*^H (Currently Quality Control Technician at VWR), Edward Lagucki (currently working for FIU after completing MS at CSU), Lily Murnen* (Currently MA student at U of Maryland)

- **Earlier:**

- **Independent Research Projects (7):** Lowell Thompson, Molly Heil*, Derek Somo*^H, Martin Vega*, LaMarcus Ford*, Joanna Sblendorio*, Thomas George*^H
 - **Other:** Yevgeniy Marusenko, Rachel Byers*, Stephanie Prevost*, James Davis*, Amy Cotlow*, Lisa Huynh*, Natalie Muillenberg*, 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)**

Note: Many of these students are co-authors on manuscripts and posters, have entered graduate programs in Ecology, are employed with environmental consulting companies, or have successfully obtained tenure track faculty positions. Eight K-12 students won awards at regional and international science fairs, one mentee won 3rd place at the international science fair.

JUSTICE, EQUITY, DIVERSITY, AND INCLUSION (JEDI)

- Supported graduate students in my lab in their outreach activities, including **STEM in the Park, Girl Power, STEMPals**, and other programs (Fall '14-Present)
- **Encouraged JEDI** best practices on a **hiring committee** (April '21 – June '21) and within my own **hiring** (April '21-Present)

- **Attended a presentation/workshop** by the **Outcast Theater Collective** at the Central Arizona Phoenix Long Term Ecological Research annual meeting on JEDI (May '21)
- **Developed a JEDI statement** with our lab group (Fall '20-Spring '21)
 - <https://blogs.bgsu.edu/mccluneylab/jedi/>
- Helped **improve departmental workload policy** as chair of the Personnel Committee (Fall '20-Spring '21)
- **Attended “Diversity Conversations” session** at the NSF Macrosystems PI Annual Meeting (January '21)
- **Attended Inclusive Pedagogy session** at BGSU teaching summit (August '20)
- **Taught AIMS summer short-course**, a week-long introduction to biology for recipients of a scholarship for **first-time and under-represented** college students (Summer '18 & Summer '19)
- **Participated in the BGSU ALLIES program**, a **semester-long learning community** on JEDI aimed at providing tools to understand bias, help targets of bias, and work towards institutional change. Funded by an NSF ADVANCE grant. ('18-'19)
- **Mentored** a member of the Ecological Society of America's **SEEDS program** at an annual meeting (Summer '13)
- **Mentor** for the Southwest Center for Education and the Natural Environment's **Research Experience for High School Students**, with some students coming from minority groups ('05-'09)
- **Mentor** for the Graduate Partners in Science Education program, working with **middle school students from marginalized communities** in Phoenix to **conduct research** ('05-'08)

OUTREACH

- **Co-creator, organizer, and host, BGSU Science Café**, a monthly seminar series aimed at the general public (Fall 2020-Present)
 - <https://www.bgsu.edu/research-economic-development/bgsu-science-cafe.html>
- **Panelist, Erie Hack**, discussing issues of water quality in Lake Erie to a group of people trying to come up with innovative solutions (Fall 2021)
- **Presentation** for the **BGSU Science Café** on research on pharmaceuticals and stream food webs (Spring 2021)
- **Presentation to BG Exchange Club** on bees and bee research (Spring 2021)
- **Supported graduate students** in my lab in their outreach activities, including STEM in the Park, Girl Power, STEMPals, and other programs (Fall 2014-Present)
- Worked with the Collab Lab to plan and run a **booth for BGSU at the “A City in Transit” event** in Toledo, hosted by the Midstory organization (Summer '19)
- **AIMS summer short-course**; week-long introduction to biology for recipients of a scholarship for first-time and under-represented college students (Summer '18 & Summer '19)
- **Taught a “magical creatures” course at Hogwarts summer camp for K-12**, teaching students about whip spiders, giant isopods, the sea mouse, and evolution (Summer '19)
- Organized and ran a **BGSU Biology booth at Kenwood Elementary School “Nature Day”** (Spring '19)

- **Participant, STEMPals;** wrote letters with a local 3rd grade student (Fall '17 – Spring '18)
- **“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)

SERVICE

Recent Service

- **Department:**
 - **Personnel Committee, Chair** (Fall '20-Spring '21), Member (Fall '19-Fall '20)
 - Merit calculations for all members of the department
 - **Helped revise merit policy and prepare internal guidance**
 - **Helped work towards a new workload policy**
 - **Helped develop and analyze survey for workload**
 - **Helped write new workload policy**
 - Advice about dealing with budget deficits
 - Wrote and/or edited letters for APR and emeritus status
 - **Computer/Web Committee, Chair** (Fall '19-Summer '21), Member (Fall '16-Fall '19)
 - **Helped get upgraded computers for Life Sciences teaching rooms**
 - **Organized revisions to the department web site**
 - **Made list of needed changes**
 - **Helped M&C redesign our home page and other pages**
 - **Gathered additional images to use**
 - **Solicited additional information from members of the department**
 - **Created department canvas page**
 - **Created department twitter account, 2016**
 - **Running the department twitter account, 2016-Present**
 - **BGSU Biology Seminar Committee, Member** (Fall '14 – Spring '21)
 - **Hiring Committee, Environmental Toxicologist**, BGSU (April '21 – June '21)
 - **Mentoring Committee**, Chris Ward (Fall '20-Spring '21)
 - Peer teaching evaluation for Julia Halo (Spring '21)
 - **Hiring Committee, Environmental Microbiologist**, BGSU (Jan '19 – July '19)
 - **Chair Succession Committee** (Nov '18 – Apr '19)
 - **Substantially revised the BIOL 2040 BGP assessments and re-organized the canvas shell** (Oct '18 – May '19)
 - **Filled in the state-level TAG requirements for BIOL 2040** (May '18)
 - Peer teaching evaluation for Kamau Mbutia (Fall '17)
 - **Hiring Committee, Environmental Toxicologist**, BGSU (Fall '16 – Spring '17)
 - **Hiring Committee, Physical Limnologist**, BGSU (Fall '15 - Spring '16)
 - **BGSU Biology Executive Committee, Member** (Fall '15 - Spring '16)

- **University:**
 - Helping to **establish the Center for Great Lakes and Watershed Studies** at BGSU (2017-Present)
 - **Graduate College appointed committee member:** Natalia Razgoniaeva (graduated 2016), Tonya Sanders (graduated 2018)
 - **Distinguished Dissertation Award Committee Member** (2014)
- **Professional**
 - **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:**
 - 2021: *Oecologia* 2x, *Current Research in Insect Science* 2x
 - 2020: *Ecology and Evolution* 2x, *Frontiers in Ecology and Evolution*
 - 2019: *Ecology*
 - 2018: *Oikos* 2x, *Aquatic Science, Ecology, Freshwater Science*
 - 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*
 - 2014: *Freshwater Biology, Diversity and Distributions, River Research and Applications*
 - *Past: 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*
- **Other**
 - **Research Advisory Committee,** Agricultural Research Foundation (December 2018-2020)
 - **Supervisory Committee,** Ohio EPA, Definition of Coldwater Stream Habitat (July '17 – January '19)
 - **Founder and Moderator,** Water Sustainability Science, Google+ online community with over 1000 members (Fall '12 – Spring '19)

Older Service

- **Invited panel member,** “How to get a post-doc,” graduate student retreat, School of Life Sciences, ASU (Fall '12)
- **Hiring Committee, Global Change Physiological Ecologist,** School of Life Sciences, ASU (Fall '08 – Spring '10)
- **Founder, Mentoring and Ethics Graduate Committee,** School of Life Sciences, ASU (Fall '08 – Fall '09)
- **Graduate Student Vice-President,** School of Life Sciences, ASU (Fall '07 – Spring '08, re-elected Spring '08 - Spring '09)

- **Organizing Committee for “Dynamic Deserts” Conference, ASU** (Fall '08 – Spring '09)
An international cross-disciplinary conference and workshop. Organized working group on resource mediated interactions producing a synthetic paper being published in *Biological Reviews*.
- **Organizing Committee for Graduates in Earth Life and Social Sciences Symposia** (Spring '04 – Spring '08)
- **Participant in Faculty Retreat, ASU** (Fall '07) Helped to develop a new graduate degree program, Environmental Life Sciences.
- **Graduate Representative, Graduate Programs Committee, School of Life Sciences, ASU** (Fall '05 – Spring '07)
- **Grant Reviewer, Graduate and Professional Student Association, ASU** (Fall '04 – Fall '05)
- **Ecology and Evolution Graduate Representative and Reading Group Leader, School of Life Sciences, ASU** (Fall '04)

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

10 Most Recent Invited Research Presentations (21 total)

1. **McCluney, K. E.** Using Organismal Physiology as a Lens to Understand the Effects of Global Change on Food Webs. Department of Biology, John Carol University, Cleveland, OH. 2021.
2. **McCluney, K. E.** Using Organismal Physiology as a Lens to Understand the Effects of Global Change on Food Webs. Department of Biology, University of Florida, Gainesville, FL. 2021. Via Zoom.
3. **McCluney, K. E.** Using Organismal Physiology as a Lens to Understand the Effects of Global Change on Food Webs. Biology Department, Kennesaw State University, Atlanta, GA. 2020. [*In person trip cancelled and converted to a virtual presentation via WebEx*]
4. **McCluney, K. E.** Using Organismal Physiology as a Lens to Understand the Effects of Global Change on Food Webs. Zoology Department, University of Illinois, Carbondale, IL. 2019.
5. **McCluney, K. E.,** J. Burdine, and M. Seidel. Physiological Approaches to Understanding the Effects of Urban Warming on Bees and Pollinator Food Webs. Entomological Society of America Annual Meeting. St. Louis, MO. 2019
6. **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.
7. **McCluney, K. E.** Water quality and aquatic-terrestrial linkages. EEOB, Ohio State University, Columbus, OH. April 2018.
8. **McCluney, K. E.,** J. L. Sabo, S. D. Frank, and J.E. Becker^{†**}. 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.

9. **McCluney, K. E.** Ecological implications of animal water balance. Department of Entomology, Ohio State University, Wooster, OH. September 2016.
10. **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.

10 Most Recent Contributed Presentations (62 total)

1. **K. E. McCluney** and J. Becker^{†**}. Urbanization-driven warming increases invertebrate lipid demand, relative to protein: A response to dehydration. Ecological Society of America Annual Meeting, Louisville KY. August 2019.
2. J. Woloschuk^{†**} and **K. E. McCluney**. How does predator mobility influence spillover from agricultural ditches into fields? Ecological Society of America Annual Meeting, Louisville KY. August 2019.
3. M. Duffy^{†**}, M. Marshall^{†**}, and **K. E. McCluney**. Determining the biological turnover rate of phosphate in agricultural soils using stable oxygen isotopes. Ecological Society of America Annual Meeting, Louisville KY. August 2019.
4. M. Seidel^{†**}, J. Burdine^{†**}, and **K. E. McCluney**. Changes in a pollinator food web in the face of climate change: Linking physiology to species interactions. Ecological Society of America Annual Meeting, Louisville KY. August 2019.
5. R. Paull^{†**} and **K. E. McCluney**. Evaluating the effects of ditch management on biodiversity and the retention and removal of nutrients. Ecological Society of America Annual Meeting, Louisville KY. August 2019.
6. **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.
7. M. Marshall^{†**} 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.
8. **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.
9. M. Marshall^{†**} 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.
10. 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.

MEDIA HIGHLIGHTS

- Article about USDA climate sensitivity of urban bees project:
<https://www.bgsu.edu/news/2020/10/are-pollinators-sensitive-to-climate-change-urbanization.html>

- Article about H2Ohio Wetlands Monitoring:
<https://www.bgsu.edu/news/2020/09/bgsu-researchers-join-dewine-s-h2ohio-water-quality-initiative.html>
- Articles about new grant looking at crustaceans in the Great Plains
 - <https://www.bgsu.edu/news/2019/10/dr-kevin-mccluney-part-of-780-000-nsf-grant-study.html>
 - <https://www.sent-trib.com/community/bgsu-professor-recognized-for-breakthrough-ecological-research/article-44623a1c-1cf0-11ea-9ab6-ff4fe817831b.html>
 - <https://www.toledoblade.com/a-e/culture/2019/10/27/bird-migration-bowling-green-bgsu-research/stories/20191028002>
- Blog about Leinbach et al 2019 paper published in *Ecology* on water and intra-guild predation: <https://fredsingerecology.com/2019/08/20/spiders-eat-spiders-sometimes/>
- BGSU news article about Burdine and McCluney 2019 paper on bees and climate sensitivity published in *Scientific Reports*:
<https://www.bgsu.edu/news/2019/02/bee-research-creates-buzz-about-urban-agriculture-climate-change.html>
- Article written by an editor of the *Journal of Experimental Biology* about Leinbach et al 2019 paper published in *Ecology* on water and intra-guild predation:
<http://jeb.biologists.org/content/222/7/jeb192724>
- Blog post about McCluney et al 2017 urban hydration paper published in the *Journal of Urban Ecology*: <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
- Articles written about McCluney and Sabo 2009 paper published in *Ecology* 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://sols.asu.edu/sites/default/files/magazines/files/sols_vol3_no2_2007.pdf
