

MEREDITH S. PALMER**email:** mspalmer@princeton.edu | **website:** meredithspalmer.weebly.com | **twitter:** @songofdodo**EDUCATION**

- 2013-18 **Ph.D.**, Ecology, Evolution, & Behavior, University of Minnesota (UMN)
Thesis: Behavioral responses to predation risk across time and space
Advisor: Dr. Craig Packer
- 2007-11 **B.A.**, Pre-Professional Zoology, Ohio Wesleyan University (OWU)
Thesis: Ultraviolet-based mate choice preferences in Sailfin mollies
Summa cum Laude, Departmental Honors, University Honors

APPOINTMENTS

- 2022-25 **National Science Foundation/Ecology & Evolution of Infectious Diseases Initiative postdoctoral research associate**, University of Glasgow (UG)
Research: Parasites and predation: effects of animal movement on trophic interactions
Advisors: Drs. Thomas Morrison & J. Grant C. Hopcraft
- 2019-21 **National Science Foundation postdoctoral fellow**, Princeton University (PU)
Research: Complex emergent effects in multi-predator multi-prey communities
Advisor: Dr. Rob Pringle
- 2018-19 **Postdoctoral research associate**, Cedar Creek Ecosystem Science Reserve (CCESR)
Research: Cascading effects of wolf recolonization on herbivores, plants, and soils
Advisors: Drs. Forest Isbell, L. David Mech, & Craig Packer

PUBLICATIONS

(†undergraduate co-author)

30. **Palmer MS**, Miller S, Packer C. Understanding predator pits: mechanisms underlying the decline of prey animals following lion reintroductions across South Africa. *Biol. Conserv.*: (In Prep.)
29. **Palmer MS**, Pluncinski J, Wang C, Pringle R. BoomBox: An Automated Behavioral Response Camera Trap Module for Wildlife Playback Experiments. *Methods Ecol. Evol.*: (In Review)
28. **Palmer MS**, Borrego N, Packer C. Social Strategies of the African Lion. In Srinivasan M, Wursing B (Eds.), *Social Strategies of Carnivorous Mammalian Predators - Hunting and Surviving as Families*. Springer-Nature. (In Review)
27. **Palmer MS**, Swanson A, Forrester J, Fieberg J, Packer C. Temporal changes in predator behavior interact with spatially-structured predation risk to create a “dynamic” landscape of fear. *J. Anim. Behav.*: (In Revision)
26. Anderson TM, Hepler SA, Holdo RM, Donaldson JE, **Palmer MS**, ..., Packer C. Body-size dependent grazing during migration generates facilitation and promotes savanna stability. *Nature*: (In Review)
25. Isbell F, **Palmer MS**, et al. Expert estimates of biodiversity loss and its drivers and consequences. *BioONE*: (In Review)
24. **Palmer MS**, Snyder K, Mbise N, Goodman P, Packer C. An overview and validation of statistical techniques to produce accurate abundance estimations of unmarked animals from camera trap survey data. *Biol. Cons.*: (In Review)
23. **Palmer MS**, Gaynor KM, Becker JL, Abraham JO, Mumma MA, Pringle RM. Schedules of fear: Temporal dynamism within a landscape of predation risk and prey response. *Trends Ecol. Evol.*: (Proposal Accepted; Manuscript In Prep.)
22. Miao Z, Liu Z, Gaynor KM, **Palmer MS**, Yu SX, Getz W. Iterative human and automated identification of wildlife images. *Nat. Mach. Intell.*: (Accepted)

21. **Palmer MS**, Packer C. Reactive anti-predator behavioral strategy shaped by predator characteristics. *PLoS ONE*: 16(8): e0256147. doi 10.1371/journal.pone.0256147
20. Suraci JP, Gaynor KM, Allen ML, **Palmer MS**, ..., Wilmers C (2021). Anthropogenic disturbance type and species life histories predict mammal responses to humans. *Glob. Chang. Biol.*: 27(16):3718-3731 doi 10.1111/gcb.15650
19. **Palmer MS**, Huebner SE, Willi M, Fortson L, Packer C (2021). Crowdsourcing, computing, and conservation: a case study of how citizen science and artificial intelligence can change the way we tackle large-scale ecological challenges. *Human Comp.*: 8(2): 54-75. doi 10.15346/hc.v8i2.123
18. Pardo L, Bombaci S, Huebner S, Somers M, **Palmer MS**, ... Venter J. (2021) Snapshot Safari: a large-scale collaborative to monitor Africa's remarkable biodiversity. *S. Afr. J. Sci.* 17(1/2) doi 10.17159/sajs.2021/8134
17. **Palmer MS**, Portales-Reyes C, Potter C, Mech D, Isbell F (2021) Spatiotemporal sensitivity to risk attenuates predator effects in an experimental test of a behaviorally-mediated trophic cascade. *Oecologia*: 195(1), 235-248. doi 10.1007/s00442-020-04816-4
16. **Palmer MS**, Willis C, Barrie K, Packer C, Moe A, Wassenberg D (2020). Using camera trap data to make authentic ecological inquiries. *CourseSource*: doi 10.24918/cs.2020.49
15. Beaudrot L, **Palmer MS**, Anderson TM, Packer C (2020). Mixed-species groups of Serengeti grazers: a test of the stress gradient hypothesis. *Ecol.*: 101(11), e03163. doi 10.1002/ecy.3163
14. Smith JA, Suraci JP, Hunter JS, Gaynor KM, Keller CB, **Palmer MS**, et al. (2020). Zooming in on mechanistic predator-prey ecology: Integrating camera traps with experimental methods reveals the drivers of interactions between predators and prey. *J. Anim. Ecol.*: 89(4), 1997-202. doi 10.1111/1365-2656.13264
13. **Palmer MS**, Krueger J, Isbell F (2019). Bats join the ranks of oxpeckers and cleaner fish as partners in a pest-reducing mutualism. *Ethol.*: 125(3): 170-175. doi 10.1111/eth.12840
12. Calo III W, Packer C, Cusack J, Jones T, **Palmer MS**, Swanson A, ... Montgomery R (2019). Quantifying the severity of giraffe skin disease via photogrammetry analysis of camera trap data. *J. Wildl. Dis.*: 55(4), 770-781. doi 10.7589/2018-06-149
11. **Palmer MS**, Swanson A, Kosmala M, Arnold T, Packer C (2018). Validating the efficacy of relative abundance indices to produce abundance estimates from large-scale camera trap surveys. *Afr. J. Ecol.*: 56, 791-803. doi 10.1111/aje.12566
10. Norouzzadeh MS, Nguyen A, Kosmala M, Swanson A, **Palmer M**, Packer C, Clune J (2018). Automatically identifying, counting, and describing wild animals in camera-trap images with deep learning. *PNAS*: 115(25), E5716-E5725. doi 10.1073/pnas.1719367115
9. **Palmer MS**, Packer C (2018). Giraffe bed and breakfast: camera traps reveal Tanzanian yellow-billed oxpeckers roosting on their large mammalian hosts. *Afr. J. Ecol.*: 56, 882-884. doi 10.1111/aje.12505
8. **Palmer MS**, Gross A[†] (2018). Eavesdropping in an African large mammal community: anti-predator responses to alarm calls vary according to the reliability of the signaler. *Anim. Behav.*: 137, 1-9. doi 10.1016/j.anbehav.2017.12.018
7. **Palmer MS**, Fieberg J, Swanson A, Kosmala M, Packer C (2017). A "dynamic" landscape of fear: Prey responses to spatiotemporal variations in predation risk across the lunar cycle. *Ecol. Lett.*: 20(11), 1364-1373. doi 10.1111/ele.12832
6. Anderson TM, White S, Davis B, Erhardt R, **Palmer MS**, Packer C (2016). The spatial distribution of African savannah herbivores: species associations and habitat occupancy in a landscape context. *Phil. Trans. R. Soc. B*: 371, 20150314. doi 10.1098/rstb.2015.0314
5. Hankison SJ, **Palmer MS** (2016). Assays to detect UV-reflecting structures and determine their importance in mate preference using the sailfin molly *Poecilia latipinna*. *JoVE.*: 115, e54453. doi 10.3791/54453

4. Ord TJ, Charles GK, **Palmer M**, Stamps JA (2016). Plasticity in social communication and its implications for the colonization of novel habitats. *Behav. Ecol.*: 27(1), 341-351. doi 10.1093/beheco/arv165
3. **Palmer MS**, Hankison SJ (2014). Ultraviolet vision and mate choice in the sailfin molly (*Poecilia latipinna*). *Acta Ethol.*: 18(2), 153-160. doi 10.1007/s10211-014-0195-3
2. Willink B, **Palmer MS**, Landberg T, Vonesh JR, Warkentin KM (2014). Predator identity and prey size-structure shape immediate and cumulative costs of risk-induced early hatching. *Evol. Eco.*: 28, 103. doi 10.1007/s10682-013-9661-z
1. Lardner B, Reed RN, Adams AA, Mazurek MJ, Hinkle TJ, Levasseur PM, **Palmer MS**, Savidge JA (2013). Selective predation by feral cats on a native skink on Guam. *IRCF's A&R: CanH*, 20(1), 16-19.

AWARDS, GRANTS, SCHOLARSHIPS

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|----------|---|
| 2021 | Accepted for competitive Council for the Advancement of Science Writers (CASW) and The National Association of Science Writers (NASW) ComSciCon-SciWri 2021 |
| 2021, 20 | WILDLABS #Tech4Wildlife Challenge 2 nd Place (x2) |
| 2021 | Nominated for Blavatnik Award for Young Scientists |
| 2021 | Nominated for ESA George Mercer Award for Early Career Researchers |
| 2020 | Howard Hughes Medical Institution BioInteractive Grant: "WildCam Gorongosa" |
| 2020 | SciStarter/Verizon Wireless: Citizen Science Month Celebration Grant |
| 2020 | IDEA WILD Equipment Grant |
| 2018-21 | National Science Foundation (NSF) Postdoctoral Research Fellowship |
| 2018 | Selected for Fulbright U.S. Scholar Program Fellowship |
| 2018 | Marie Skłodowska-Curie Actions Seal of Excellence |
| 2016 | Institute on the Environment MiniGrant: "Camera Trapping for the Classroom" |
| 2016 | James W. Wilkie Fund for Natural History Fellowship |
| 2016 | UMN Council of Graduate Students Community-Building Award |
| 2016 | UMN Thesis Research Grant |
| 2016 | Alexander & Lydia Anderson Grant |
| 2016-18 | UMN Graduate Excellence Fellowship |
| 2015 | UMN Council of Graduate Students Conference Travel Award |
| 2015 | Oppenheimer & Sons Diamond Route Travel Award |
| 2015 | Florence Rothman Fellowship |
| 2014-17 | UMN Ecology, Evolution, & Behavior Department Research Award (x4) |
| 2014-17 | UMN Ecology, Evolution, & Behavior Department Travel Award (x4) |
| 2014 | NSF DEB-1357368: Predator-Prey Interactions Gordon Research Conference |
| 2013-16 | NSF Graduate Research Fellowship Program |
| 2011 | Slocum Prize Winner in Science |
| 2011 | Indiana University Animal Behavior Undergraduate Poster Award |
| 2011 | Indiana University Animal Behavior Conference Travel Grant |
| 2011 | Society for Integrative & Comparative Biology (SICB) Travel Grant |
| 2011 | Charlotte Magnum Student Support SICB Scholarship |
| 2011 | OWU Student Travel Grant: SICB Conference |
| 2010 | OWU Theory into Practice Grant: Community Conservation in Borneo |
| 2009 | Goldwater Scholarship |
| 2008 | OWU Student Travel Grant: Midwestern Primatology Conference |
| 2008 | Edward L. Rice Scholarship for Field Work |
| 2008, 09 | Wilson Ornithological Society Travel Grant (x2) |
| 2007 | National Merit Scholarship Finalist |
| 2007 | OWU Presidential Scholarship |
| 2007 | N. V. Peale Scholarship |
| 2007 | Glen Galton Scholarship |

2007 Ohio Student Choice Scholarship

BIOLOGY RESEARCH & WORK EXPERIENCE. (Locations provided for international work)

- 2021 Scientific consultant, **SimplyFun Educational Games**
Advising on Serengeti wildlife dynamics and species interactions for children's game
- 2020- Science and analytics advisor, **Wildlife Insights/Conservation International**
Advancing camera trap best practices and technology, image identification with AI, data processing and discovery, synthetic camera trap analyses (www.wildlifeinsights.org)
- 2019- Research and database manager, **WildCam Gorongosa** (Mozambique)
Citizen science, camera trapping, capacity building, STEM education, predator rewilding, and ecosystem recovery (www.wildcamgorongosa.org)
- 2019- Database manager, **Serengeti GIS and Data Center** (Tanzania)
Curation of geospatial and non-spatial data for the Greater Serengeti-Mara Ecosystem
- 2019-20 Scientific consultant, **BBC Studios "The Great African Waterhole"** (Tanzania)
Advising on predator and prey activity at African waterholes for documentary series
- 2019 Scientific consultant, **Google DeepMind** (England)
Advising on projects harnessing machine learning for biology and conservation
- 2018 Co-founder, research and database manager, **Eyes on the Wild**
Citizen science, camera trapping, education, and predator recovery (www.eyesonwild.org)
- 2017 Scientific consultant, **Singita Grumeti Fund** (Tanzania)
Camera trapping, ecological monitoring, and human-wildlife conflict resolution
- 2015-18 Co-founder, research and database manager, **Snapshot Safari** (Tanzania, Mozambique, South Africa, Botswana, Zimbabwe)
Citizen science, camera trapping, and adaptive management; standardizing camera trap methodologies to allow comparative research (www.snapshotsafari.org)
- 2013-18 Research and database manager, **Snapshot Serengeti** (Tanzania)
Citizen science and camera trapping (www.snapshotserengeti.org)
- 2013-18 Research and database manager, **Serengeti Lion Project** (Tanzania)
Long-term monitoring, demographic and behavioral data (www.lionresearch.org)
- 2012-13 Biologist I and II, **Brown Tree Snake Project & Rapid Response Team, USGS** (Guam)
Biology and behavior of an invasive reptile
- 2012 Field assistant and station manager, **University of California, Riverside** (Trinidad)
Evolutionary-ecological feedback between guppies and tropical stream system
- 2012 Field assistant, **Cornell University** (Trinidad)
Ecosystem-level processes in freshwater streams
- 2011 Field assistant, **University of Zurich** (South Africa)
Evolution and socio-ecology of small mammals in Karoo Desert
- 2011 Field assistant, **Nyati Conservation Corps** (South Africa)
African wildlife management and conservation
- 2010 Biological monitoring volunteer, **MESCOT Initiative** (Borneo)
Sustainable ecotourism and conservation
- 2010 NSF REU, **Smithsonian Tropical Research Institute** (Panama)
Trade-offs associated with premature hatching in the Red-eyed tree frog
- 2009 NSF REU, **U.C. Davis/Harvard** (Puerto Rico)
Evolution of behaviorally plastic communication in the Yellow-chinned anole
- 2008-10 Curator of reptiles and amphibians, **Ohio Wesleyan University Zoology Museum**
- 2009 Summer Science Research Program (SSRP), **Ohio Wesleyan University**
Development of behavioral syndromes in response to predation in stickleback

- 2009 Independent study, **Ohio Wesleyan University**
Preening behaviors in sparrows and their effects on feather microbiota.
- 2009 Independent study, **Ohio Wesleyan University** (Costa Rica)
Inter- and intra-specific dominance interactions among tropical hummingbirds
- 2008 Intern, **Cheetah Conservation Fund** (Namibia)
Data management, animal care, and public education
- 2008 Independent study, **Primate Behavior and Conservation Field School** (Costa Rica)
Ecology of seed dispersal in Mantled howler and Black-handed spider monkeys
- 2008 Intern, **Chimps Inc. Chimpanzee Sanctuary**
Animal care and behavioral research
- 2008 Independent study, **Ohio Wesleyan University**
Characterization of an unidentified mountain lion tapeworm
- 2007 Independent study, **Ohio Wesleyan University**
Effects of *Musophagidae* Cu⁺ pigmentation on bacterial degradation of plumage
- 2006 Intern, **Jaguar Conservation Fund/University of Washington** (Brazil)
Using scat detection dogs to locate carnivores along boundaries of national parks

POSTERS & PRESENTATIONS

38. **Palmer MS** (2022). Navigating a multi-predator landscape of fear: behavioral tactic of large herbivores to avoid predation. *University of Vienna* (**invited speaker**)
37. **Palmer MS** (2021). How do I support capacity building efforts in conservation tech? *WILDLABS Tech Tutors* (**invited speaker**)
36. **Palmer MS**, Gaynor KM, Hutchinson M, Becker J, Abraham J, Phillips E, Bouley P, Pringle R (2021). Reinstating a landscape of fear: community-wide behavioral responses to predator reintroduction. *International Congress for Conservation Biology* (talk)
35. **Palmer MS**, Gaynor KM, Hutchinson M, Becker J, Abraham J, Phillips E, Bouley P, Pringle R (2021). Reinstating a landscape of fear: community-wide behavioral responses to predator reintroduction. *Animal Behavior Society* (talk)
34. **Palmer MS**, Gaynor KM, Hutchinson M, Becker J, Abraham J, Phillips E, Bouley P, Pringle R (2021). Reinstating a landscape of fear: community-wide behavioral responses to predator reintroduction. *Ecological Society of America* (poster)
33. **Palmer MS**, Gaynor KM, Hutchinson M, Becker J, Abraham J, Phillips E, Bouley P, Pringle R (2021). Reinstating a landscape of fear: community-wide behavioral responses to predator reintroduction. *International Congress of Zoology* (poster)
32. **Palmer MS** (2021). Carnivores, camera traps, and conservation: the past, present, and future of African ecology. *National Classical Education Symposium* (**invited speaker**)
31. **Palmer MS** (2021). Carnivores and camera traps: large-scale monitoring to tackle conservation crises. *University of Illinois INHS* (**invited speaker**)
30. **Palmer MS** (2020). Navigating a landscape of fear: anti-predator decision making and its ecological impacts. *Princeton University EEB Seminar Series* (**invited speaker**)
29. **Palmer MS**, Snyder K, Mbise N, Goodman P, Packer C (2019). Estimating abundance of unmarked herbivores from camera trap data. *International Symposium of Integrative Zoology* (**invited speaker**)
28. **Palmer MS** (2019). Survival in a landscape of fear. *OWU Zoology Research Seminar Series* (**invited speaker**)
27. **Palmer MS** (2019). Into the wild: the adventures and misadventures of a professional zoologist. *OWU Sagan National Colloquium* (**invited speaker**)
26. **Palmer MS**, Peterson S (2019). Computing for conservation: how can machine learning and

- data science inform ecology? *Deep Learning Indaba* (**invited speaker**)
25. **Palmer MS**, Pringle R (2019). Emergent multiple predator effects: examining the mechanisms that structure predator-prey interactions in multi-predator communities. *Savanna Science Network Meeting* (talk)
 24. **Palmer MS**, Mech D, Isbell F (2018). Wolf recovery and the restoration of ecological systems? *2018 International Wolf Symposium* (poster)
 23. **Palmer MS**, Packer C (2018). Multi-predator interactions shape a dynamic landscape of fear. *Supercomputing Institute 2018 Research Exhibition* (**poster winner**)
 22. **Palmer MS**, Fieberg J, Packer C (2018). Dynamic landscapes of fear: how large herbivores respond to temporal variations in predation risk. *Predator-Prey Interactions Gordon Research Conference* (**invited speaker**)
 21. **Palmer MS**, Swanson A, Kosmala M, Packer C (2017). Camera traps for applied management: an overview of statistical techniques to produce abundance estimates from survey data. *Symposium for Contemporary Conservation Practice* (**invited speaker**)
 20. **Palmer MS**, Packer C (2017). Survival in a landscape of fear: Prey behavioral responses to multi-dimensional predation risk. UMN Ecology Department 50th Anniversary Symposium (**invited poster**)
 19. **Palmer MS**, Packer C (2017). Snapshot Safari: Cameras, science, conservation. *Citizen Science Association Conference* (talk)
 18. **Palmer MS**, Fieberg J, Swanson A, Kosmala M, Packer C (2017). Ungulate responses to fluctuating temporal predation risk. *Savanna Science Network Meeting* (poster)
 17. **Palmer MS**, Packer C (2016). Snapshot Safari: Cameras, science, conservation. *7th Annual Diamond Route Research Conference* (poster)
 16. **Palmer MS**, Fieberg J, Swanson A, Kosmala M, Packer C. (2016). Ungulate responses to fluctuating temporal predation risk. *Predator-Prey Gordon Research Conference* (poster)
 15. **Palmer MS**, Fieberg J, Swanson A, Kosmala M, Packer C (2016). Ungulate responses to fluctuating temporal predation risk. *Supercomputing Institute Research Exhibition* (poster)
 14. **Palmer MS**, Packer C (2015). Adaptive ungulate anti-predator behaviors. *6th Annual Diamond Route Research Conference* (talk)
 13. **Palmer MS**, Packer C (2015). Adaptive ungulate anti-predator behaviors. *South African Lion Management Forum Annual Meeting* (talk)
 12. **Palmer MS**, Swanson A, Packer C (2014). Impact of predators on herbivore spatio-temporal distributions in Serengeti. *Predator-Prey Gordon Research Conference* (poster)
 11. **Palmer MS**, Hankison SJ (2012). Ultraviolet mate choice decision in mollies. *Society for Integrative and Comparative Biology* (poster)
 10. **Palmer MS**, Hankison SJ (2012). Ultraviolet mate choice decision in mollies. *Animal Behavior Conference* (poster)
 9. **Palmer MS**, Hankison (2011). Behavioral syndromes in Three-spine stickleback. *Indiana University Animal Behavior Conference* (**poster winner**)
 8. **Palmer MS**, Willink B, Landberg T, Vonesh J, Warkentin K (2011). Cost of hatching early: vulnerability and period of exposure to predators. *Ohio Academy of Science* (poster)
 7. **Palmer MS**, Willink B, Landberg T, Vonesh J, Warkentin L (2011). Cost of hatching early: vulnerability and period of exposure to predators. *Society for Integrative and Comparative Biology* (poster)
 6. **Palmer MS**, Hankison SJ (2010). Behavioral syndromes in Three-spine stickleback. *Ohio Academy of Science* (poster)
 5. **Palmer MS**, Burt EH (2010). Plumage microbial community as a force driving the evolution of maintenance behavior. *25th International Ornithological Congress* (talk by EH Burt)

4. **Palmer MS**, Burt EH (2009). Plumage microbial community as a force driving the evolution of maintenance behavior. *American Ornithologists' Union* (poster)
3. **Palmer MS**, Deatsman R, Burt EH (2009). Dominance interactions among Neotropical hummingbirds. *Wilson Ornithological Society* (poster)
2. **Palmer MS**, Lindshield S, Dingess K (2008). Seed dispersal: comparison between howler monkeys and spider monkeys. *Midwest Primate Interest Group* (poster)
1. **Palmer MS**, Burt EH (2008). Effects of copper pigmentation in Turaco feathers on bacterial degradation. *Wilson Ornithological Society* (poster)

TEACHING & CAPACITY BUILDING

- 2021 Guest lecturer: *Tropical Ecology & Conservation: Serengeti (EEB 344)*, Princeton University
- 2021 Guest lecturer: *Vertebrate Natural History (BIOZ 313)*, Virginia Commonwealth University
- 2021 Mentor: "ALPHA (All People Have Access) for Students with Cognitive Disabilities", Minneapolis Public Schools
- 2021 Mentor: "Flight Path", Red Wing Public Schools
- 2021 Guest lecturer: *Animal Behavior (ZOO 343)*, Ohio Wesleyan University
- 2021 Contributor: *Scientist in Every Florida School*, Florida Museum
- 2020 Guest lecturer: *Vertebrate Natural History (BIOZ 313)*, Virginia Commonwealth University
- 2020 Mentor: *EXCELEerator Program*, Coalition Wild (www.coalitionwild.org/excelerator)
- 2020 Contributor: *Earth School*, TED-Ed and UN Environment (www.ed.ted.com/earth-school)
- 2020 Mentor: *Women in Ecology Mentoring Scheme*, British Ecological Society
- 2020 Contributor: *1 Million Women in STEM* (www.1mwis.com)
- 2020 Course development: 'Fight or Flight' Module, Twig Education (www.twigeducation.com)
- 2019 Course development: *Tanzanian Women in Conservation Program*, Grumeti Fund (Tanzania)
- 2019 Lead and developer: 'Camera Trap Methods and Analysis' Workshop, Gorongosa M.Sc. in Conservation Program (Mozambique)
- 2019 Lead and developer: 'Camera Traps and Conservation' Hack-a-Thon, Deep Learning Indaba/Kenyatta University (Kenya)
- 2019 Contributor: *Letters to a Pre-Scientist* (www.prescientist.org)
- 2019 Contributor: *1000 STEM Women* (<https://www.doane.edu/1000-stem-women-project>)
- 2018-21 Contributor: *Skype a Scientist* (www.skypeascientist.com)
- 2018 Guest lecturer: *Ecology (3407/5407)*, CCSR/UMN
- 2018 Fellow for Inclusive Excellence: *Howard Hughes Medical Institute*
- 2018 Guest lecturer: *Discover Stem in Nature*, North Central Research & Outreach Center/UMN
- 2018 Guest lecturer: *Science of Animal Behavior (ANB 101)*, Carroll University
- 2017 Teaching assistant: *Ecology (EEB 3407)*, UMN
- 2017 Guest lecturer: *Ecology Field Methods*, WildTrax Explorations Field School (Botswana)
- 2016-17 Course development: *Remote Learning with "Snapshot Serengeti"*
- 2016 Teaching assistant: *Animal Behavior (EEB 3412)*, UMN
- 2015-16 Course development: *Evolutionary & Ecological Perspectives (BIOL 1001)*, UMN
- 2015-16 Course development: *Our Environmental Environment (BIOL 1055)*, UMN
- 2015, 18 Mentor: *Nature of Life (BIOL 1805/1806)*, UMN
- 2013-21 Academic advisor/co-advisor: 15 undergraduate students, seven M.Sc. students (2 Tanzanian, 3 Mozambican, 1 French, 1 American)

PROFESSIONAL SERVICE

- 2021 Topic Editor, *Frontiers in Ecology & Evolution (Special Issue: Behaviorally-Mediated Trophic Cascades)*
- 2021 Topic Editor, *Animals (Special Issue: Frontiers in Predator-Prey Ecology)*
- 2021 Proposal Reviewer, *Graduate Women in Science National Fellowship*
- 2019- Associate Editor, *Journal of Zoology*
- 2019- Student Representative (North East), *Wild Felid Research and Management Association*

2019 Emerging Youth Conservation Ambassador, *CoalitionWILD*
2015-19 Student Representative (Midwest), *Wild Felid Research and Management Association*
2017 Fundraising committee, *International Society for Behavioral Ecology*
2015-17 Founder, Graduate Student *Mental Health and Wellbeing Group*, UMN
2014-15 President, *Animal Behavior Group*, UMN
2009-11 Student Representative, *Chemistry Student Board*, OWU
2009-11 President, *Zoology Student Board*, OWU
2008-09 Student Representative, *Zoology Student Board*, OWU