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EDUCATION

- 2020 PENNSYLVANIA STATE UNIVERSITY, Ph.D. in Ecology
Dissertation: Advancing quantitative methods to disentangle population- and community-level processes at multiple scales.
Committee: Dr. David Miller (chair), Dr. Tyler Wagner, Dr. Ephraim Hanks, Dr. Matthew Ferrari
- 2015 PENNSYLVANIA STATE UNIVERSITY, M.S. in Ecology
Thesis: Dynamic approaches to modeling wetland community responses to changing water availability.
Committee: Dr. David Miller (chair), Dr. Tyler Wagner, Dr. Katriona Shea
- 2013 CORNELL UNIVERSITY, B.S. in Biological Sciences
- 2013 CORNELL UNIVERSITY, B.S. in Animal Science

PROFESSIONAL APPOINTMENTS

- 2022– Research Associate: Applied Quantitative Ecologist, Conservation Science Program, Center for Avian Population Studies, Cornell Lab of Ornithology; *Supervisor:* Dr. Viviana Ruiz-Gutierrez
- 2021–22 NSF Postdoctoral Fellow, Department of Integrative Biology, Michigan State University; *Supervisor:* Dr. Elise Zipkin
- 2020–22 Rose Postdoctoral Fellow, Cornell Lab of Ornithology, Cornell University; *Supervisor:* Dr. Viviana Ruiz-Gutierrez
- 2019–20 Graduate Service Assistant, Ecology IGDP, Pennsylvania State University; *Supervisor:* Dr. Jason Kaye
- 2019 Education Specialist, Upward Bound Summer Academy, Pennsylvania State University; *Supervisor:* Jonathan McCausland
- 2015–18 Academic Computing Graduate Fellow, Pennsylvania State University; *Supervisor:* Dr. David A.W. Miller
- 2013–15 Graduate Research/Teaching Assistant, Ecology IGDP, Pennsylvania State University; *Supervisor:* Dr. David A.W. Miller
- 2012 CALS Alumni Association Research Scholar, NY Agriculture Experiment Station, Cornell University; *Supervisor:* Dr. Anthony Shelton
- 2009–13 Assistant Curator of Birds & Mammals, Cornell University Museum of Vertebrates; *Supervisor:* Charles Dardia

PUBLICATIONS

Published (* = mentee/advisee)

Accepted

- (15) Smith, O.M., Davis, K.L., Pizza, R., Waterman, R., Dobson, K., Foster, B., Jarvey, J., Jones, L., Leuenberger, W., Nourn, N., Conway, E., Fiser, C., Hansen, Z., Hristova, A., Mack, C., Saunders, A., Utley, O.J., Young, M., & **Davis, C.L.** Peer review perpetuates barriers to historically excluded groups. Accepted at *Nature Ecology and Evolution*.

2023

- (14) **Davis, C.L.**, Walls, S.C, Barichivich, W.J., Brown, M.E., & Miller, D.A.W. Disentangling direct and indirect effects of extreme events on coastal wetland communities. In press at *Journal of Animal Ecology*. DOI: [10.1111/1365-2656.13874](https://doi.org/10.1111/1365-2656.13874)
- (13) **Davis, C.L.**, Guralnick, R., & Zipkin, E. Challenges and opportunities for using natural history collections to estimate insect population trends. In press at *Journal of Animal Ecology*. DOI: [10.1111/1365-2656.13763](https://doi.org/10.1111/1365-2656.13763)
- (12) **Davis, C.L.**, Muñoz, D.J., Amburgey, S.M., Dinsmore*, C.R., Teitsworth*, E.W., & Miller, D.A.W. Multistate model to estimate sex-specific dispersal rates and distances for a wetland breeding amphibian population. *Ecosphere*, 14(1), e4345. DOI: [10.1002/ecs2.4345](https://doi.org/10.1002/ecs2.4345)

2022

- (11) Reinke, B.A., Cayuela, H., Janzen, F.J., Lemaître, J.F., Gaillard, J.M., Lawing, A.M., Iverson, J.B., Christiansen, D.G., Martinex-Solano, I., Sánchez-Montes, G., Gutiérrez-Rodríguez, J., Rose, F.L., Nelson, N., Keall, S., Crivelli, A.J., Nazirides, T., Grimm-Seyfarth, A., Henle, K., Mori, E., Guiller, G., Homan, R., Olivier, A., Muths, E., Hossack, B.R., Bonnet, X., Pilliod, D.S., Lettink, M., Whitaker, T., Schmidt, B.R., Gardner, M.G., Cheylan, M., Poitevin, F., Golubović, A., Tomović, L., Arsovski, D., Griffiths, R.A., Arntzen, J.W., Baron, J.P., Le Galliard, J.F., Tully, T., Luiselli, L., Capula, M., Rugiero, L., McCaffery, R., Eby, L.A., Briggs-Gonzalez, V., Mazzotti, F., Pearson, D., Lambert, B.A., Green, D.M., Jreidini, N., Angelini, C., Pyke, G., Thirion, J.M., Joly, P., Léna, J.P., Tucker, T., Limpus, C., Priol, P., Besnard, A., Bernard, P., Stanford, K., King, R., Garwood, J., Bosch, J., Souza F., Bertoluci, J., Famelli, S., Grossenbacher, K., Lenzi, O., Matthews, K., Boitaud, S., Olson, D.H., Jessop, T.S., Gillespie, G., Clobert, J., Richard, M., Valenzuela-Sánchez, A., Fellers, G.M., Kleeman, P.M., Halstead, B.J., Grant, E.H.C., Byrne, P.G., Frétey, T., Le Garff, B., Levionnois, P., Maerz, J.C., Pichenot, J., Olgun, K., Üzümlü, N., Avci, A., Miaud, C., Elmberg, J., Brown, G.P., Shine, R., Bendik, N.F., O'Donnell, L., **Davis, C.L.**, Lannoo, M.J., Stiles, R.M., Cox, R.M., Reedy, A.M., Warner, D.A., Bonnaire, E., Grayson, K., Ramos-Targarona, R., Baskale, E., Muñoz, D., Measey, J., de Villiers, F.A., Selman, W., Ronget, V., Bronikowski, A.M., & Miller, D.A.W. 2022. Diverse aging rates in ectotherms provide insights for the evolution of aging and longevity. *Science*, 376(6600), 1459–1466. DOI: [10.1126/science.abm0151](https://doi.org/10.1126/science.abm0151)

- (10) Robinson, O.J., Socolar, J.B, Stuber, E.F., Auer, T., Berryman, A.J., Boersch-Supan, P.H., Brightsmith, D.J., Burbidge, A.H., Butchart, S.H.M., **Davis, C.L.**, Dokter, A.M., Di Giacomo, A.S., Farnsworth, A., Fink, D., Hochachka, W.M., Howell, P.E., La Sorte, F.A., Lees, A.C., Marsden, S., Martin, R., Martin, R.O., Masello, J.F., Miller, E.T., Moodley, Y., Musgrove, A., Noble, D., Ojeda, V., Quillfeldt, P., Royle, J.A., Ruiz-Gutierrez, V., Tella, J.L., Yorio, P., Youngflesh, C., & Johnston, A. 2022. Extreme uncertainty and unquantifiable bias do not inform population sizes. [Letter] *Proceedings of the National Academy of Sciences*, 119(10), e2113862119. [DOI: 10.1073/pnas.2113862119](https://doi.org/10.1073/pnas.2113862119)

2019

- (9) **Davis, C.L.**, Miller, D.A.W., Grant, E.H.C., Halstead, B., Kleeman, P., Walls, S.C., & Barichivich, W.J. 2019. Linking climatic variability to wetland habitat suitability: is it possible to forecast regional responses from simple climate measures? *Wetlands Ecology and Management*, 27(1), 39–53. [DOI: 10.1007/s11273-018-9639-2](https://doi.org/10.1007/s11273-018-9639-2)

2018

- (8) Ferreguetti, A.C., **Davis, C.L.**, Tomas, W.M., & Berhallo, H.G. Using activity and occupancy to evaluate niche partitioning: the case of two peccary species in the Atlantic Rainforest, Brazil. *Hystrix*, 29(2), 168–174. [DOI: 10.4404/hystrix-00068-2018](https://doi.org/10.4404/hystrix-00068-2018)
- (7) **Davis, C.L.**, Rich, L.N., Farris, Z.J., Kelly, M.J., Di Bitetti M.S., Di Blanco Y., Albanesi, S., Farhadinia, M.S., Gholikhani, N., Hamel, S., Harmsen, B.J., Wulsch, C., Kane, M.D., Martins, Q., Murphy, A.J., Steenweg, R., Sunarto, S., Taktehrani, A., Thapa, K., Tucker, J.M., Whittington, J., Widodo, F.A., Yoccoz, N.G., & Miller, D.A.W. 2018. Ecological correlates of the spatial co-occurrence of sympatric mammalian carnivores worldwide. *Ecology Letters*, 21(9). [DOI: 10.1111/ele.13124](https://doi.org/10.1111/ele.13124)
- (6) Miller, D.A.W., Grant, E.H.C., Muths, E., Amburgey, S.M., Adams, M.J., Joseph, M.B., Waddle, H., Johnson, P.T.J., Ryan, M.E., Schmidt, B.R., Calhoun, D.L., **Davis, C.L.**, Fisher, R.N., Green, D.M., Hossack, B.R., Rittenhouse, T.A.G., Walls, S.C., Bailey, L.L., Cruickshank, S.S., Fellers, G.M., Forman, T.A., Haas, C.A., Hughson, W., Pilliod, D.S., Price, S.J., Ray, A.M., Sadinski, W., Saenz, D., Barichivich, W.J., Brand, A., Brehme, C.S., Dagit, R., Delaney, K.S., Glorioso, B.M., Kats, L.B., Kleeman, P.M., Pearl, C.A., Rochester, C.J., Riley, S.P.D., Roth, M. & Sigafus, B.H. 2018. Quantifying climate driven change in North American amphibian communities. *Nature Communications*, 9(1). [DOI: 10.1038/s41467-018-06157-6](https://doi.org/10.1038/s41467-018-06157-6)
- (5) **Davis, C.L.**, Teitworth*, E., & Miller, D.A.W. Linking multiple data sources to inform inference on spotted salamander population abundance. 2018. *J. of Herpetology*, 52(2), 116–126. [DOI: 10.1670/17.110](https://doi.org/10.1670/17.110)
- (4) Sparkman, A.M., Chism, K., Bronikowski, A., Brummett, L., Combrink, L., **Davis, C.L.**, Holden, K., Kabey, N., & Miller, D.A.W. 2018. Use of field-portable ultrasonography reveals differences in developmental phenology and maternal egg provisioning in two sympatric viviparous snakes. *Ecology and Evolution*, 8(6), 3330–3340. [DOI: 10.1002/ece3.3928](https://doi.org/10.1002/ece3.3928)

2017

- (3) Rich, L.N., **Davis, C.L.**, Farris, Z.J., Tucker, J.M., Hamel, S., Farhadinia, M.S., Steenweg, R., Di Bitetti, M.S., Thapa, K., Kane, M.D., Sunarto, S., Robinson, N.P., Paviolo, A., Cruz, P., Martins, Q., Gholikhani, N., Taktehrani, A., Whittington, J., Widodo, F.A., Yoccoz, N.G., Wultsch, C., Harmsen, B.J., & Kelly, M.J. 2017. Assessing global patterns in carnivore occupancy and richness by integrating local camera trap surveys. *Global Ecology and Biogeography*, 26, 918–929. DOI: [10.1111/geb.12600](https://doi.org/10.1111/geb.12600)
- (2) **Davis, C.L.**, Miller, D.A.W., Walls, S.C, Barichivich, W.J., Riley, J., & Brown, M.E. 2017. Species interactions and the effects of climate variability on a wetland amphibian metacommunity. *Ecological Applications*, 27(1), 285–296. DOI: [10.1002/eap.1442](https://doi.org/10.1002/eap.1442)
- (1) **Davis, C.L.**, Miller, D.A.W., Walls, S.C, Barichivich, W.J., Riley, J., & Brown, M.E. Life history plasticity does not confer resilience in the mole salamander (*Ambystoma talpoideum*). 2017. *Oecologia*, 183(3), 739–749. DOI: [10.1007/s00442-017-3810-y](https://doi.org/10.1007/s00442-017-3810-y)

Submitted

- (3) Dinsmore*, C.R., Bronikowski, A., Sparkman, A.M., **Davis, C.L.**, Muñoz, D.J., Avery, J., Arnold, S., & Miller, D.A.W. Princes and paupers: Lifelong effects of food availability on structural growth and body reserves in garter snakes. Submitted to *Ecology*.
- (2) **Davis, C.L.**, Bai, Y., Chen, D., Robinson, O., Ruiz-Gutierrez, V., Gomes, C.P., & Fink, D. Deep-learning with citizen science data enables estimation of species diversity and composition at continental extents. In review at *Ecology*.
- (1) Muñoz, D.J., Grant, E.H.C., Dinsmore, C.R., Sutherland, C., Matlaga, T., Sterrett, S.C., Grayson, K., Thompson, L.M., Fisher-Reid, M.C., Murray Hyde, A.L., Devlin, C.M., Warwick, A.R., Mead, L., Epp, K.J., Yurewicz, K.L., Losito, M.P., Bastiaans, E., Fleming, J., Peterman, B., Puza, V., Wright, A.D., **Davis, C.L.**, & Miller, D.A.W. Seasonality and local climate predict range-wide variation in body size and individual growth rates of a widespread salamander. In review at *Ecography*.

In Preparation

- (3) Lello-Smith, A., **Davis, C.L.**, Ruiz-Gutierrez, V., Strimas-Mackey, M., Tingley, M., & Rodewald, A.D. Selecting baselines for forest restoration in tropical regions with high beta diversity. Current target: *Journal of Applied Ecology*.
- (2) Dinsmore*, C.R., Bronikowski, A., Sparkman, A.M., **Davis, C.L.**, Muñoz, D.J., Avery, J., Arnold, S., & Miller, D.A.W. Effects of environmental variability on demography in populations of Common Garter Snakes – *Thamnophis sirtalis*. Current target: *Journal of Herpetology*.
- (1) Zipkin, E., Doser, J. **Davis, C.L.**, Leuenberger, W., Ayebare, S., & Davis, K. Integrated community models: A framework combining multi-species data sources to estimate the status, trends, and dynamics of biodiversity. Current target: *Journal of Animal Ecology*.

Technical Reports

- (3) The Biodiversity Progress Index: a tool for measuring and communicating the impact of regenerative practices on biodiversity. March 2022. Nespresso AAA Sustainable Quality Program.
- (2) Preliminary results of the Biodiversity Progress Index: Impact of the AAA Sustainable Quality program on biodiversity in Colombia. December 2021. Nespresso AAA Sustainable Quality Program.
- (1) Landscape-level results of the Biodiversity Progress Index: Impact of the AAA Sustainable Quality program on biodiversity in Costa Rica. August 2021. Nespresso AAA Sustainable Quality Program.

Popular Press

- (1) The Salamander Crisis: They face a deadly fungal threat. *National Bsal Task Force*. Reptiles Magazine (2016)

Book Reviews

- (1) **Davis, C.L.** Review of *The Bird Friendly City: Creating Safe Urban Habitats*, by Timothy Beatley. 2021. *Journal of Field Ornithology*, 92(3), 304–313.

RESEARCH GRANTS AND FELLOWSHIPS (to date: \$611,390)

2022	Pilot Grant Funding, Donor Gift, Cornell Lab of Ornithology	\$25,000
2021	NSF Postdoctoral Fellowship in Biology Supplemental Funding	\$69,000
2020	NSF Postdoctoral Fellowship in Biology (Collections)	\$168,000
2020	Rose Postdoctoral Fellowship, Cornell Lab of Ornithology	\$126,000
2018	Russel D. and Gloria T. Harrar Scholarship	\$47,000
2017	College of Agricultural Science Competitive Grant	\$3,000
2015	Academic Computing Fellowship, Penn State University	\$166,500
2013	Fund for Excellence in Graduate Recruitment	\$2890
2012	CALS Alumni Association Research Award, Cornell University	\$4000

ACADEMIC AWARDS

2019	College of Agricultural Science Graduate Travel Grant
2018	Biometrics Working Group Travel Grant, Wildlife Society
2018	Andersen Award Travel Grant, Ecology IGDP, Penn State University
2017	Roger M. Latham Memorial Award, Penn State University
2014	College of Agricultural Sciences Domestic Travel Award
2014	Outstanding Graduate Student Teaching Assistant

UNDERGRADUATE RESEARCH FUNDING (to date: \$14,000)

2022	V. Halterman. Experiential Learning Grant, Cornell Lab of Ornithology. (\$6000)
2019	K. Reese. College of Agricultural Sciences Undergraduate Student Research Grant, Pennsylvania State University. <i>Modeling the temporal and spatial variation of oviposition site selection for pond-breeding amphibians</i> . (\$2000)

- 2016 C. Dinsmore. College of Agricultural Sciences Undergraduate Student Research Grant, Pennsylvania State University. *Modeling larval spotted salamander growth in vernal pool communities*. (\$3000)
- 2016 C Dinsmore. College of Agricultural Sciences Undergraduate Student Research Grant, Pennsylvania State University. *Larval amphibian growth monitoring*. (\$3000)

PROFESSIONAL PRESENTATIONS (* = mentee/advisee)

Invited Seminars and Symposia

- 2022 **Davis, C.L.** Hidalgo*, A.V., Ruiz-Gutierrez, V., Kong, S., Zhao, W., Ligocki, S., Gomes, C., & Fink D. Advances in citizen science and community ecology reveal multi-scale land-use impacts on Neotropical avifauna. *Invited Symposium: "Responses of the Neotropical forest avifauna to climate and land-use change"* American Ornithological Society, Puerto Rico.
- 2022 **Davis, C.L.**, Hidalgo*, A.V., Chen, D., Kong, S., Bai, Y., Zhao, W., Gomes, C., Fink, D., Ligocki, S., & Ruiz-Gutierrez, V. Birds of a feather: Citizen-science data and deep-learning methods reveal changes in species interactions and diversity throughout annual migrations. *Invited Symposium: "Chancing on a spectacle: co-occurring animal migrations and interspecific interactions."* International Ornithological Conference, Durban, South Africa.
- 2022 **Davis, C.L.**, Hidalgo*, A.V., Kong, S., Zhao, W., Gomes, C., Fink, D., Ligocki, S., & Ruiz-Gutierrez, V. The Biodiversity Progress Index: a cost-effective approach to measure and communicate ecosystem health in multifunctional landscapes. *Invited Symposium: "Examining private sector engagement in biodiversity conservation."* North American Congress on Conservation Biology, Reno, NV, USA.
- 2020 **Davis, C.L.** Conserving biodiversity: Using statistics to quantify community assembly and structure. Ornithology Seminar, Cornell Lab of Ornithology, Cornell University, NY, USA.
- 2017 **Davis, C.L.**, & Miller, D.A.W. Joint estimation of species and habitat dynamics. *Invited session in Biometrics*, The Wildlife Society, Albuquerque, NM, USA.
- 2015 **Davis, C.L.**, Miller, D.A.W., Walls, S.C, Barichivich, W.J., Riley, J., & Brown, M.E. Species traits, habitat dynamics, and community interactions determine amphibian responses to changing water availability. *Invited session*, Ecological Society of America, Baltimore, MD, USA.

Contributed Conference Presentations (presenting author)

- 2019 **Davis, C.L.**, Miller, D.A.W., Walls, S.C., Barichivich, W.J., Brown, M.E. Integrating dynamic multispecies occupancy and structural equation models to understand amphibian community responses to extreme weather events. Wildlife Society, Reno, NV, USA.
- 2018 **Davis, C.L.**, Rich, L.N., Farris, Z.J., Kelly, M.J., Di Bitetti M.S., Di Blanco Y., *et al.* Ecological determinants of the spatial co-occurrence of sympatric mammalian carnivores worldwide. Wildlife Society, Cleveland, OH, USA.
- 2018 **Davis, C.L.**, Miller, D.A.W., Walls, S.C., Barichivich, W.J., Brown, M.E., Riley, J.E., & O'Donnell, K. Integrating multispecies occupancy and structural equation

- models to estimation amphibian community dynamics and wetland hydroperiod. The International Statistical Ecology Conference, St. Andrews, UK.
- 2018 **Davis, C.L.**, Teitsworth*, E., & Miller, D.A.W. Linking multiple data sources to inform inference on spotted salamander population abundance. Pennsylvania Chapter of The Wildlife Society, State College, PA, USA.
- 2017 **Davis, C.L.**, Miller, D.A.W., Hanks, E. A Variational Bayesian approximation of a multispecies occupancy model. Euring Analytical Meeting, Barcelona, Spain.
- 2016 **Davis, C.L.**, Teitsworth*, E., & Miller, D.A.W. Linking multiple data sources to inform inference on spotted salamander population abundance. Wildlife Society, Raleigh, NC, USA.
- 2016 **Davis, C.L.**, Miller, D.A.W., Walls, S.C, Barichivich, W.J., Riley, J., & Brown, M.E. Species traits, physical environment, and community interactions influence responses of wetland breeding amphibians to environmental change. International Statistical Ecology Conference, Seattle, WA, USA.
- 2015 **Davis, C.L.**, Miller, D.A.W., Walls, S.C, Barichivich, W.J., Riley, J., & Brown, M.E. Species traits, habitat dynamics, and community interactions determine amphibian responses to changing water availability. Wildlife Society, Pittsburgh, PA, USA.
- Invited Research Presentations*** (presenting author)
- 2021 **Davis, C.L.**, Hidalgo*, A.V., Kong, S., Zhao, W., Ligocki, S., Gomes, C.P., Fink, D., Gutierrez, V.R. Landscape-level results of the Biodiversity Progress Index: Impact of the AAA Sustainable Quality program on biodiversity. Our Coffee Our Birds Project Update.
- 2021 **Davis, C.L.**, Hidalgo*, A.V., Kong, S., Zhao, W., Ligocki, S., Gomes, C.P., Fink, D., Gutierrez, V.R. The Biodiversity Progress Index: A cost-effective approach to measure and communicate ecosystem health. El Ministerio de Ambiente y Energía. CR.
- 2021 **Davis, C.L.**, Hidalgo*, A.V., Kong, S., Zhao, W., Ligocki, S., Gomes, C.P., Fink, D., Gutierrez, V.R. The Biodiversity Progress Index: A cost-effective approach to measure and communicate ecosystem health in multi-functional landscapes. Sistema Nacional de Áreas de Conservación Costa Rica.
- 2021 **Davis, C.L.**, Hidalgo*, A.V., Kong, S., Zhao, W., Ligocki, S., Gomes, C.P., Fink, D., Gutierrez, V.R. Community-based assessments of avian biodiversity and ecosystem health. Virtual Summit: Biodiversity Progress Index.
- 2020 **Davis, C.L.** Advancing quantitative methods to disentangle population- and community-level processes at multiple scales. Pennsylvania State Ecology Defense Seminar, University Park, PA, USA.
- 2020 **Davis, C.L.**, Walls, S.C, Barichivich, W.J., Riley, J., Brown, M.E., & Miller, D.A.W. Disentangling direct and indirect effects of extreme events on coastal wetland communities. Pennsylvania State Ecology Mini-symposium, University Park, PA, USA.
- 2015 **Davis, C.L.**, Miller, D.A.W., Walls, S.C, Barichivich, W.J., Riley, J., & Brown, M.E. Life history plasticity does not confer resilience in the mole salamander (*Ambystoma talpoideum*). Pennsylvania State Ecology Mini-symposium, University Park, PA, USA.

- 2012 **Davis, C.L.**, Olmstead, D.L., & Shelton, A.M. A new approach to forecasting season-long infestations of corn earworm in western New York. Cornell University College of Agriculture and Life Sciences Alumni Board.

TEACHING EXPERIENCE

Course Instructor

- 2022 DNRE 4120, *Population Estimation*, Cornell University
- 2019 WFS 497 Special Topics, *Estimating Population Vital Rates for Management and Conservation*, Pennsylvania State University
- 2019 *Climate Change and Climate Justice*, Upward Bound Program Summer Academy, Pennsylvania State University
- 2019 Capstone Research Program, Upward Bound Program Summer Academy, Pennsylvania State University
- 2017 Independent Study, *Bayesian Estimation and Hierarchical Models*, Pennsylvania State University
- 2017 WFS 496 Lab, *Wildlife & Fisheries Population Dynamics*, Pennsylvania State University

Curriculum Development

- 2022 *Population Estimation*, Cornell University
- 2019 *Estimating Population Vital Rates for Management and Conservation*, Pennsylvania State University
- 2019 *Climate Change and Climate Justice*, Upward Bound Program Summer Academy, Pennsylvania State University
- 2017 *Bayesian Estimation and Hierarchical Models*, Pennsylvania State University
- 2017 *Wildlife & Fisheries Population Dynamics*, Pennsylvania State University

Teaching Assistant

- 2014–16 WFS 496, *Wildlife & Fisheries Population Dynamics*, Pennsylvania State University
- 2011 ANSCI 3700, *Immunology in Animal Health & Disease*, Cornell University

Workshops (^Instructor; +Instructor & Organizer)

- 2019⁺ Data Integration for Species Distribution Modeling, National Wildlife Society Annual Meeting, Reno, NV.
- 2019⁺ Technologies for Individual Monitoring in Fisheries and Wildlife, Pennsylvania Chapters of the Wildlife Society and American Fisheries Society Joint Meeting, State College, PA.
- 2019[^] Structured Decision-Making for Vernal Pool Management, U.S. Fish and Wildlife Service, National Wildlife Refuge System, Hadley MA.
- 2018⁺ Monitoring wetland ecosystems and wetland-breeding amphibians, Pennsylvania Chapter of the Wildlife Society Annual Meeting, State College, PA.
- 2016[^] Hierarchical Modeling Workshop: Site-occupancy and species distribution models for international ecologists, São Paulo, Brazil.

Guest Lectures

- 2022 Avian Community Ecology: Patterns of Species Diversity, *Ornithology*, Cornell University, Ithaca NY.
- 2017 Estimating spotted salamander abundance: when ecology and statistics collide. *General Ecology*, Pennsylvania State University, University Park PA.
- 2015 Who's where: modeling the biotic and abiotic factors that contribute to wetland community assembly. *Herpetology*, Pennsylvania State University, University Park PA.

MENTORING AND CONSULTING EXPERIENCE

Mentoring

- 2022– V. Halterman. Undergraduate experiential learning scholar. Cornell University.
- 2020– Á. Vega-Hidalgo. Computational biologist. Cornell University.
- 2019–20 K. Reese. Undergraduate scholar. Pennsylvania State University.
- 2016–20 C. Dinsmore. Undergraduate scholar, M.S. student. Pennsylvania State University.
- 2017–18 A. Ferreguetti. Visiting PhD student from Brazil. Pennsylvania State University.
- 2015–17 E. Teitsworth. Undergraduate research technician. Pennsylvania State University.

Statistical Consulting

- 2022 K. Navarro-Velez. PhD student. Cornell University.
- 2022 A. Lello-Smith. PhD student. Cornell University.
- 2019 B. Assis. PhD student. Pennsylvania State University.
- 2019 E. Maynard. PhD student. Pennsylvania State University.
- 2019 M. Perkins. PhD student. Pennsylvania State University.

Graduate Program Committees

- 2021 V. Zulian. PhD student. Universidade Federal do Rio Grande do Sul. Brazil.
Dissertation title: *Distribution and global population size of threatened Amazona parrots of the Atlantic Forest: A statistical analysis with data integration*. Defended 9/10/2021.

PROFESSIONAL SERVICE

Professional Organizations and Working Groups

- 2020 Biometrics Working Group Board Member, The Wildlife Society
- 2016–18 National Bsal (*Batrachochytrium salamandrivorans*) Task Force: Outreach and Communication Working Group (see: salamanderfungus.org)
- 2014 USGS Powell Center: Elucidating Mechanisms Underlying Amphibian Declines in North America Using Hierarchical Spatial Models Working Group
- 2014–15 Statistical and Applied Mathematical Sciences Institute (SAMSI): Multivariate Models, Climate & Biodiversity Working Group
- 2013–15 Conservation Education Award Committee, The National Wildlife Society

University Service

- 2021–22 Cornell Lab of Ornithology Community Listening Committee, *Member*
- 2021–22 Cornell Lab of Ornithology Justice, Equity, Diversity, Inclusion Committee, *Member*
- 2019–20 Ecology IGDP Fall Seminar Series, *Student Organizer*
- 2016–17 Evolutionary Ecology IGDP Research Symposium, *Student Organizer*
- 2016–17 Evolutionary Ecology IGDP Spring Seminar Series, *Student Organizer*
- 2016–17 Ecology Graduate Student Organization, *Vice President & Treasurer*
- 2015–16 Advisory Council for Research Computing & Cyberinfrastructure, *Grad Representative*
- 2015–16 Ecology Graduate Student Organization, *Secretary*
- 2015–16 Huck Institutes of Life Sciences Advisory Board, *Ecology Representative*
- 2015–16 Graduate & Professional Student Association, *Executive Secretary*
- 2015–16 University Commission on Student Fees, *Graduate Representative*
- 2014–15 Graduate & Professional Student Association, *Executive Treasurer*
- 2014–15 CAS Graduate Advisory Council, *President*
- 2014–15 Environmental Chemistry & Microbiology Symposium, *Judging Coordinator*
- 2013–16 Science Café Initiative, Ecology IGDP, *Chair*
- 2011–13 National Society of Collegiate Scholars, *President & Social Chair*
- 2011–13 CALS Academic Integrity Hearing Board

Community Service & Outreach

- 2019 Pennsylvania Junior Academy of Science, *State Judge*
- 2018 ‘The Newt-iful Lives of Salamanders’ Science Pub Discussion
- 2017 Wildlife Conservation Weekend at Pennsylvania State, Philadelphia Zoo ‘ZooCrew’
- 2017 ‘Amphibians & Reptiles’ at Haunted-U, Pennsylvania State University
- 2016 ‘Reptiles & Amphibians in your backyard!’ Nature Go Unplugged, Millbrook Marsh
- 2016 ‘Reptiles!’ EarthDay Birthday, Millbrook Marsh
- 2015–19 4-H Wildlife and Forestry Field Day
- 2015 ‘What is Ecology?’ Graduate Women in Science's Girl Scout Workshop
- 2014–20 Centre Wildlife Care, *Wildlife Rehabilitation Volunteer*
- 2014–16 Eberly College of Science, *Outreach & Education Volunteer*
- 2014–15 Pennsylvania Junior Academy of Science, *State Judge*
- 2014–15 Undergraduate Exhibition, Penn State University, *Judge*

Journal Reviewer (listed alphabetically)

Annales Zoologici Fennici; Behavioral Ecology and Sociobiology; Biotropica; Canadian Journal of Zoology; Community Ecology; Copeia; Diversity and Distributions; Ecological Applications; Ecological Monographs; Ecosphere; Herpetological Conservation Biology; Hydrobiologia; Journal of Agricultural, Biological and Environmental Statistics; Journal of Herpetology; Journal of Mammalogy; Journal of Wildlife Management; Methods in Ecology and Evolution; PeerJ; PLoSOne; Wetlands

PROFESSIONAL CERTIFICATIONS

Postdoctoral Leadership Certificate, Cornell University

Teaching Certificate, Pennsylvania State University Graduate School

Graduate Student Online Teaching Certificate, Pennsylvania State World Campus