
CONTACT INFORMATION	✉ E-mail: jwdoser@ncsu.edu Tel: (919) 513-1248	Homepage: https://www.doserlab.com GitHub: https://github.com/doserjef
RESEARCH INTERESTS	Statistical Ecology, Forest Biometrics, Spatial Statistics, Forest and Wildlife Management	
EDUCATION	Michigan State University , East Lansing, MI	
	<ul style="list-style-type: none"> • Ph.D., Forestry and Ecology, Evolution, and Behavior 2018-2022 <ul style="list-style-type: none"> • Advisor: Andrew O. Finley • M.S., Applied Statistics 2018-2021 	
	State University of New York at Geneseo , Geneseo, NY.	
	<ul style="list-style-type: none"> • B.S. Mathematics and Biology Summa Cum Laude 2014-2018 	
ACADEMIC EXPERIENCE	Assistant Professor , North Carolina State University	2024 - Current
	<ul style="list-style-type: none"> • Department of Forestry and Environmental Resources • Fisheries, Wildlife, and Conservation Biology Program 	
	Postdoctoral Research Associate , Michigan State University	2022 - 2024
	<ul style="list-style-type: none"> • Department of Integrative Biology • Institute of Biodiversity, Ecology, Evolution, and Macrosystems • Advisor: Elise F. Zipkin 	
	Graduate Research Assistant , Michigan State University	2018-2022
	<ul style="list-style-type: none"> • Department of Forestry • Advisor: Andrew O. Finley 	
PEER REVIEWED PUBLICATIONS		
UNDER REVIEW	<p>33. Fertakos, M., Bradley, B.A., Doser, J.W., Itter, M.S. Joint species distribution modeling for restoration of American Chestnut (<i>Castanea dentata</i>) in the United States under current and future climate conditions. <i>In review at Journal of Applied Ecology</i>.</p> <p>32. Mehmood, S., Doser, J.W., Roise, J., Cabbage, F. Growth, yield, and economic analyses for managing shortleaf pine <i>Book chapter in review for The Ecology and Management of Shortleaf Pine Ecosystems. In review after minor revision.</i></p> <p>31. Vanamamalai, A., Karanth, K.K., Doser, J.W., DeFries, R. Estimating the occurrence and detection of human-elephant conflict in India through a Bayesian occupancy modeling framework. <i>In review at Biological Conservation after major revision.</i></p>	
2026	<p>30. Doser, J.W., Edwards, M., Larson, K.A., Zipkin, E.F., Jennelle, C.S. (2026). Estimating spatially varying occupancy trends for multi-scale conservation: An amphibian case study in the midwestern United States. <i>Journal of Applied Ecology</i>. 63, e70342. https://doi.org/10.1111/1365-2664.70342</p> <p>29. Goldstein, B.R., Doser, J.W., Pease, B.P., Pacifici, K. (2026). Should you use data integration for your distribution model? <i>Journal of Animal Ecology</i>. 95, 591-604. https://doi.org/10.1111/1365-2656.70210</p>	

28. Ashton-Butt, A., Newson, S.E., **Doser, J.W.**, Gillings, S., Kornienko, T., Frenchuk, V., Scott, C., Pearce-Higgins, J., Atkinson, P.W. (2025). Acoustic monitoring enables multi-taxa conservation assessment and prioritisation over large scales and for rare and cryptic species. *Global Ecology and Biogeography*. 34(12), e70175. <https://doi.org/10.1111/geb.70175>.
27. **Doser, J.W.**, Itter, M.S., Domke, G.M., Finley, A.O. (2025). Multivariate spatial models for small area estimation of species-specific forest inventory parameters. *Forest Ecology and Management*. 597 (12). <https://doi.org/10.1016/j.foreco.2025.123112>.
26. Leuenberger, W., **Doser, J.W.**, Belitz, M.W., Ries, L., Haddad, N.M., Thogmartin, W.E., Zipkin, E.F. (2025). Three decades of declines restructure butterfly communities in the Midwestern U.S. *Proc. Natl. Acad. Sci. U.S.A.* 122(33) e2501340122, <https://doi.org/10.1073/pnas.2501340122>.
25. **Doser, J.W.**, Pacifici, K. (2025). Discussion on “Continuous-space occupancy models” by Wilson J. Wright and Mevin B. Hooten. *Biometrics*. 81(2), ujaf056. <https://doi.org/10.1093/biomtc/ujaf056>.
24. Dean, C.D., Chiarenza, A.A., **Doser, J.W.**, Farnsworth, A., Jones, L.A., Lyster, S., Outhwaite, C.L., Butler, R.J., Mannion, P.D. (2025). The structure of the end-Cretaceous dinosaur fossil record in North America. *Current Biology*. <https://doi.org/10.1016/j.cub.2025.03.025>.
23. Youngflesh, C., Kapsar, K., Uscanga, A., Williams, P.J., **Doser, J.W.**, Kounta, L., Zarnetske, P.L. (2025). Environmental variability shapes life history of the world’s birds. *Ecology Letters*. 28: e70077. <https://doi.org/10.1111/ele.70077>.
22. Kellner, K.F., **Doser, J.W.**, Belant, J.L. (2025). Functional R code is rare in species distribution and abundance papers. *Ecology*. 106(1): e4475 <https://doi.org/10.1002/ecy.4475>.
21. **Doser, J.W.**, Finley, A.O., Saunders, S.P., Kéry, M., Weed, A.W., Zipkin, E.F. (2025). Modeling complex species-environment relationships through spatially-varying coefficient occupancy models. *Journal of Agricultural, Biological, and Environmental Statistics*, 30(1) 146-171. <https://doi.org/10.1007/s13253-023-00595-6>.

20. Quinlan, G.M., **Doser, J.W.**, Kammerer, M., Grozinger, C.M. (2024). Estimating genus-specific effects of non-native honey bees and urbanization on wild bee communities in the Eastern United States. *Science of the Total Environment*. 953, 175783. <https://doi.org/10.1016/j.scitotenv.2024.175783>.
19. **Doser, J.W.**, Finley, A.O., Kéry, M., Zipkin, E.F. (2024) **spAbundance**: An R package for single-species and multi-species spatially-explicit abundance models. *Methods in Ecology and Evolution*. 15, 1024-1033. <https://doi.org/10.1111/2041-210X.14332>.
18. Gilbert, N.A., Amaral, B.R., Smith, O.M., Williams, P.J., Ceyzyk, S., Ayebare, S., Davis, K.L., Leuenberger, W., **Doser, J.W.**, Zipkin, E.F. (2024). A century of statistical Ecology. *Ecology*. 105(6): e4283. <http://doi.org/10.1002/ecy.4283>.
17. **Doser, J.W.**, Kéry, M., Saunders, S.P., Finley, A.O., Bateman, B.L., Grand, J., Reault, S., Weed, A.W., Zipkin, E.F. (2024). Guidelines for the use of spatially-varying coefficients in species distribution models. *Global Ecology and Biogeography*. 33, e13814. <https://doi.org/10.1111/geb.13814>.
16. Bajcz, A.W., Glisson, W.J., **Doser, J.W.**, Larkin, D.J., Fieberg, J.R. (2024). A within-lake occupancy model for starry stonewort, a stealthy aquatic invader, to support early detection and monitoring. *Scientific Reports*. 14, 2644. <https://doi.org/10.1038/s41598-024-52608-0>.
15. Kovalenko, V., **Doser, J.W.**, Bate, L.J., Six, D.L. (2024). Paired acoustic recordings and point count surveys reveal Clark’s nutcracker and whitebark pine associations across Glacier National Park. *Ecology and Evolution*, 14, e10867. <https://doi.org/10.1002/ece3.10867>.
14. Zipkin, E.F., **Doser, J.W.** (2024). Context matters in ecological forecasting: Lessons in predicting species distributions. *Global Change Biology*. 30(1), e17123. <https://doi.org/10.1111/gcb.17123>.
13. **Doser, J.W.**, Stoudt, S. (2024). “Fractional replication” in single-visit multi-season occupancy models: Impacts of spatio-temporal autocorrelation on identifiability. *Methods in Ecology and Evolution*. 15, 358–372. <https://doi.org/10.1111/2041-210X.14275>.

12. Roberts, C.P., **Doser, J.W.**, Berry, L.L., Fowler, A., Marshall, P.M., Middaugh, C., Rowe, K., Schmit, J., Shaw, M., Wilson, K. (2024). Scenario planning and multi-species occupancy models reveal positive avian responses to restoration of afforested woodlands. *Restoration Ecology*. 32(1) e13998. <https://doi.org/10.1111/rec.13998>.
- 2023
11. Zipkin, E.F., **Doser, J.W.**, Davis, C.L., Leuenberger, W.L., Ayebare, S., Davis, K.L. (2023). Integrated community models: A framework combining multi-species data sources to estimate the status, trends, and dynamics of biodiversity. *Journal of Animal Ecology*. 92(12) 2248-2262. <https://doi.org/10.1111/1365-2656.14012>.
10. Ayebare, S., **Doser, J.W.**, Plumptre, A., Owunji, I., Mugabe, H., Zipkin, E.F. (2023). An environmental habitat gradient and within-habitat segregation enable co-existence among ecologically similar bird species. *Proceedings of Royal Society B*. 290(2005), 20230467. <https://doi.org/10.1098/rspb.2023.0467>.
9. **Doser, J.W.**, Finley, A.O., Banerjee, S. (2023). Joint species distribution models with imperfect detection for high-dimensional spatial data. *Ecology*. 104(9): e4137. <https://doi.org/10.1002/ecy.4137>.
- 2022
8. **Doser, J.W.**, Finley, A.O., Kéry, M., Zipkin, E.F. (2022). `spOccupancy`: An R package for single-species, multi-species, and integrated spatial occupancy models. *Methods in Ecology and Evolution*. 13(8), 11670-1678. <https://doi.org/10.1111/2041-210X.13897>.
7. **Doser, J.W.**, Leuenberger, W., Sillett, T.S., Hallworth, M.T., Zipkin, E.F. (2022). Integrated community occupancy models: A framework to assess occurrence and biodiversity dynamics using multiple data sources. *Methods in Ecology and Evolution*. 13(4), 919-932. <https://doi.org/10.1111/2041-210X.13811>.
- 2021
6. **Doser, J.W.**, Weed, A.S., Zipkin, E.F., Miller, K.M., Finley, A.O. (2021). Trends in bird abundance differ among protected forests but not bird guilds. *Ecological Applications* 31(6):e02377. <https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1002/eap.2377>.
5. **Doser, J.W.**, Finley, A. O., Weed, A. S., Zipkin, E. F. (2021). Integrating automated acoustic vocalization data and point count surveys for estimation of bird abundance. *Methods in Ecology and Evolution*, 12(6), 1040-1049. <https://doi.org/10.1111/2041-210X.13578>.
4. Hoffmann, H.M., Meadows, J.D., Breuer, J.A., Yaw, A.M., Nguyen, D., Tonsfeldt, K.J., Chin, A.Y., Devries, B.D., Khan, R., Trang, C., Oosterhouse, H.J., Sora Lee, J., **Doser, J.W.**, Gorman, M. R., Welsh, D.K., Mellon, P. L. (2021). The transcription factors VAX1 and SIX3 are required for suprachiasmatic nucleus circadian output and fertility in female mice. *Journal of Neuroscience Research*. <https://doi.org/10.1002/jnr.24864>.
- 2020
3. Teimouri, M., **Doser, J.W.**, Finley A.O. (2020) `ForestFit`: An R package for modeling plant size distributions. *Environmental Modelling & Software*, 131, 104668. <https://doi.org/10.1016/j.envsoft.2020.104668>.
2. **Doser, J.W.**, Finley, A.O., Kasten, E.P., Gage, S.H. (2020). Assessing soundscape disturbance through hierarchical models and acoustic indices: A case study on a shelterwood logged northern Michigan forest. *Ecological Indicators*, 113, 106244. <https://doi.org/10.1016/j.ecolind.2020.106244>.
1. **Doser, J.W.**, Hannam, K.M., Finley, A.O. (2020). Characterizing functional relationships between anthropogenic and biological sounds: A western New York state soundscape case study. *Landscape Ecology*, 35(3), 689-707. <https://doi.org/10.1007/s10980-020-00973-2>.
- IN PREP
- **Doser, J.W.**, Khurram, S., Ariez, M.N., Groninger, J.W. Small area estimation of basal area in a highly inaccessible forest region. *To be submitted to Forest Ecology and Management*.
 - Pretorius, M.*, Larsen-Gray, A., **Doser, J.W.** Applications of National Forest Inventory data for wildlife conservation and management. *To be submitted to Forest Ecology and Management*.
 - Amaral, B.R., **Doser, J.W.**, Weed, A.S., Zipkin, E.F. Protecting birds in protected areas: a multi-scale analysis of landscape context and species occurrence. *To be submitted to Landscape Ecology*.

- Bisch, A., Elliot, S., **Doser, J.W.**, Stephan, P., Acou, A. Conservation hotspots and Marine Protected Areas: Revealing opportunities to protect threatened chondrichthyans in the North-East Atlantic. *To be submitted to Journal of Applied Ecology*.
- **Doser, J.W.**, Howell, R.⁺, Busby, A.R.[†]. Survey design considerations for spatial occupancy models. *To be submitted to Methods in Ecology and Evolution*.
- Pretorius, M.* , Shaver, M.⁺, **Doser, J.W.** Spatial variation in oak population dynamics across the eastern US. *To be submitted to Ecological Applications*.
- **Doser, J.W.**, Itter, M.S. Bayesian spatially varying coefficient models for local calibration of height-diameter curves. *To be submitted to Canadian Journal of Forest Research*.

*Postdoctoral Researcher, [†]Graduate Student, ⁺Undergraduate Student

TEACHING EXPERIENCE

Course Instructor

- North Carolina State University
 - FOR 474 Forest Measurement, Modeling, and Inventory Fall 2024-Current
 - FOR 273 Forest System Mapping and Mensuration II Summer 2025-Current
 - FOR 491 Statistics in the Natural Resources Spring 2026-Current
- Michigan State University
 - FOR/STT 875 R Programming for Data Sciences Summer 2020-2022
 - IBIO 831 Statistical Methods in Ecology and Evolution Spring 2022

Workshops and Webinars

- Hierarchical spatial modelling for applied population and community ecology 2024
 - Swiss Ornithological Institute. Sempach, Switzerland. *Invited*.
 - June 24-27, 2024 (4 days).
 - Open-source materials.
- Introduction to applied Bayesian analysis in wildlife ecology 2024
 - The Wildlife Society. Remote. *Invited*.
 - May 11, 2024 (1 day).
 - Open-source materials.
- Spatially-explicit occupancy modeling with the spOccupancy R package 2023
 - The Wildlife Society Annual Conference. Louisville, Kentucky.
 - November 9, 2023 (1 day).
 - Open-source materials.
- Scalable Bayesian models and estimation methods for the analysis of big spatial data 2023
 - Conference on Applied Statistics and Natural Resources. West Lafayette, Indiana. *Invited*.
 - May 15, 2023 (1 day).
 - Open-source materials.
- Spatially-explicit occupancy modeling with the spOccupancy R package. 2022
 - Ecological Society of America Statistical Ecology Webinar Series. Remote. *Invited*.
 - October 3, 2022 (1.5 hours).
 - Recording and open-source materials.
- Bayesian occupancy modeling with the spOccupancy R package 2022
 - Living Landscapes Lab. University of Arkansas. Remote. *Invited*.
 - July 20, 2022 (1 hour).
- Bayesian occupancy modeling with the spOccupancy R package 2022
 - Tel Aviv University. Tel Aviv, Israel.
 - July 27, 2022 (1 hour).
- Bayesian occupancy modeling with acoustic data in spOccupancy 2022
 - Cornell Acoustic Methods Working Group Series. Remote. *Invited*.
 - July 19, 2022 (1 hour).

- Recording and Open-source materials.

Teaching Assistant

- Michigan State University
 - FOR/STT 875 R Programming for Data Sciences Summer 2018-2020
 - FOR 472 Ecological Monitoring and Data Analysis Fall 2018
- State University of New York at Geneseo
 - BIOL 116 Introductory Biology Laboratory Fall 2016

Guest Lecturer

- Michigan State University
 - IBIO 860: Modern Statistical Models in Ecology Spring 2023
 - * Two guest lectures on capture-recapture models

BOOKS UNDER CONTRACT Finley, A.O. and **Doser, J.W.** *Introduction to Forestry Data Analysis with R*. Chapman & Hall CRC. *In press*. To be published in September 2026. <https://ifdar-book.org/>.

SOFTWARE **rFIA. Dosier, J.W.**, Stanke, H., Finley, A.O. (Dec 2024 - current). Estimation of Forest Variables using the FIA Database. Downloaded 33,905 times as of April 7, 2026. <https://cran.r-project.org/web/packages/rFIA/index.html>. Current developer and maintainer.

spAbundance. Dosier, J.W., Finley, A.O. (Oct 2023 - current). Univariate and Multivariate Spatial Modeling of Species Abundance. Downloaded 17,150 times as of April 7, 2026. <https://cran.r-project.org/web/packages/spAbundance/index.html>. Original and current developer and maintainer.

spOccupancy. Dosier, J.W., Finley, A.O. (Nov 2021 - current). Single-species, Multi-species, and Integrated Spatial Occupancy Models. Downloaded 34,811 times as of April 7, 2026. <https://cran.r-project.org/web/packages/spOccupancy/index.html>. Original and current developer and maintainer.

GRANTS United States Climate Alliance. *Advancing software capacity for forest carbon estimation to inform climate policy*. 2026-2027. PI (\$99,986).

McIntire-Stennis Capacity, NIFA. *Addressing uncertainty in multi-objective forest management: Quantitative tools and applications to NC State College of Natural Resources forest assets*. 2025-2029. PI (\$646,028).

Pending: NSF, DBI. *Advancing software capacity for the statistical analysis of AI-processed ecological data*. PI (\$431,987).

Pending: USDA, NIFA. *Managing the microbiome for forest productivity*. Co-PI (\$732,020).

GRADUATE AND POSTDOC GRANTS USDA Agriculture and Food Research Initiative: *A national-scale early detection and ecosystem service impact assessment tool for invasive plants*. Statistical consultant. 2023-2027. (\$650,000)

NSF, DEB, Collaborative Research MRA: *Estimating and forecasting nonstationary, multi-scale climate and land-use effects on avian communities*. Postdoctoral Researcher. 2023-2028. (\$1,306,419)

US National Park Service. *Developing spatially explicit integrated models to evaluate avian distributions and regional bird population dynamics in eastern US National Parks*. Postdoctoral Researcher and Graduate Student Mentor. 2022-2026. (\$228,084)

AWARDS AND HONORS	David R. Anderson Outstanding Student Paper Award, Biometrics Working Group, The Wildlife Society	2022
	SUNY Chancellor's Award for Student Excellence	2018
	Excellence in Mathematics, SUNY Geneseo	2018
	Dr. Sam Molnar Scholar Athlete Award, SUNYAC	2018
	James Fulton Award for Academic and Athletic Excellence, SUNYAC	2018
	Barry M. Goldwater Scholarship.	2017
	Phi Beta Kappa Honors Society, SUNY Geneseo	2017
	SUNY Chancellor's Scholar-Athlete Award	2016-2018
	Edgar Fellows Honors Program	2014-2018
UNIVERSITY SERVICE	Scholarship Committee, Department of Forestry and Environmental Resources, North Carolina State University,	2025-present
	Ecology, Evolution, and Behavior Program Research Symposium Chair, Michigan State University,	2021-2022
	Ecology, Evolution, and Behavior Program Graduate/Postdoc Awards Committee, Michigan State University,	2020-2022
	Ecology, Evolution, and Behavior Program Research Symposium Committee, Michigan State University	2021
	Treasurer, Graduate Student Organization, Department of Forestry, Michigan State University	2019-2020
	Student Athlete Advisory Committee, SUNY Geneseo	2015-2018
PROFESSIONAL SERVICE	Secretary, Statistical Ecology Section of the Ecological Society of America	2024-present
EDITORIAL SERVICE	Associate Editor, <i>Methods in Ecology and Evolution</i>	2025-present
	Associate Editor, <i>Ecology</i>	2025-present
	NSF Panel Review	2024
	Peer Reviews: <i>Nature Ecology and Evolution</i> (1), <i>Current Biology</i> (2), <i>Methods in Ecology and Evolution</i> (11), <i>Ecological Monographs</i> (2), <i>Ecological Applications</i> (1), <i>Ecography</i> (5), <i>Ecology</i> (3), <i>Conservation Biology</i> (4), <i>Journal of the American Statistical Association</i> (1), <i>Landscape Ecology</i> (1), <i>Biological Invasions</i> (1), <i>Diversity and Distributions</i> (3), <i>Ecological Indicators</i> (3), <i>Forest Ecology and Management</i> (1), <i>Canadian Journal of Forest Research</i> (1), <i>Animal Conservation</i> (2), <i>PLOS Computational Biology</i> (1), <i>Ecological Solutions and Evidence</i> (3), <i>Ecology and Evolution</i> (2), <i>Ornithological Applications</i> (2), <i>Biometrics</i> (2), <i>Ecological Modelling</i> (1), <i>Environmental DNA</i> (1), <i>Biodiversity and Conservation</i> (1), <i>Avian Conservation and Ecology</i> (2), <i>Ecosphere</i> (1), <i>Journal of Ornithology</i> (1), <i>Insect Conservation and Biodiversity</i> (1), <i>PLOS ONE</i> (1), <i>Ekológia</i> (1)	
INVITED SEMINARS AND PRESENTATIONS	Doser, J.W. Multivariate spatial models for high-dimensional ecological data. January 23, 2026. North Carolina State University Department of Statistics Seminar Series. Raleigh, North Carolina, USA.	
	Doser, J.W. Model-based small area estimation for national forest inventories. June 12, 2025. U.S. Forest Service. Research Triangle Park, North Carolina, USA.	
	Doser, J.W. Applications of spatially varying coefficient models for multi-scale conservation. June 10, 2025. Vogelwarte (Swiss Ornithological Institute). Online.	

- Doser, J.W.** Modern quantitative approaches for making the most out of large-scale forest inventories. March 26, 2025. University of Kentucky Department of Forestry & Natural Resources. Lexington, Kentucky, USA.
- Doser, J.W.** Multivariate spatial models for high-dimensional ecological data. March 12, 2025. National Centre for Statistical Ecology Seminar Series. Online.
- Doser, J.W.** Advances in hierarchical modeling for biodiversity conservation. November 19, 2024. Biodiversity Lab, North Carolina State University. Raleigh, NC, USA.
- Doser, J.W.** Advances in hierarchical spatial modeling for forest and wildlife management. November 8, 2024. University of Washington Quantitative Seminar Series. Online. [Recording available online.](#)
- Doser, J.W.** Advances in hierarchical spatial modeling for biodiversity conservation. August 26, 2024. The University of Queensland Centre for Biodiversity and Conservation Science Seminar Series. Online. [Recording available online.](#)
- Doser, J.W.**, Saunders, S.P., Reault, S., Bateman, B.L., Grand, J., Zipkin, E.F. July 2024. Integrated community occupancy modeling to improve estimates of population and community change. Joint Meeting of Ichthyologists and Herpetologists. Pittsburgh, Pennsylvania, USA.
- Doser, J.W.** May 2024. Novel quantitative approaches for wildlife conservation in the 21st century. University of Florida. Department of Wildlife Ecology and Conservation. Gainesville, Florida, USA.
- Doser, J.W.** February 2024. Unraveling the complexities of biodiversity using hierarchical models. University of Toronto. Department of Ecology and Evolutionary Biology. Toronto, Canada.
- Doser, J.W.** January 2024. Computational advances for big spatial data with applications to biodiversity conservation. Stony Brook University Institute for Advanced Computational Science Seminar Series. Stony Brook, New York, USA.
- Doser, J.W.** March 2023. Unraveling the complexities of biodiversity using hierarchical models. University of Central Florida Department of Biology. Orlando, Florida, USA.
- Doser, J.W.**, Finley, A. O., Zipkin, E. F. March 2023. High-dimensional spatial models for predicting forest biomass and bird distributions across the continental US. BayesComp 2023. Levi, Finland.
- Doser, J.W.** February 2023. Unraveling the complexities of biodiversity using hierarchical models. Utah State University Department of Wildland Resources. Logan, Utah, USA.
- Doser, J.W.** January 2023. Hierarchical models for high-dimensional ecological data across large spatial domains. Bucknell University Department of Mathematics Distinguished Visiting Professor Program. Lewisburg, Pennsylvania, USA.
- Doser, J.W.** November 2022. Using spatially-explicit occupancy models to understand occurrence and biodiversity patterns across macroscales. University of Arkansas Biology Seminar Series. Fayetteville, Arkansas, USA.
- Doser, J.W.**, Finley, A.O., Banerjee, S. August 2022. Joint species distribution models with imperfect detection for high-dimensional spatial data. Joint Statistical Meetings. Washington, D.C., USA
- Doser, J.W.**, Itter, M.S., Domke, G.M., Finley A.O. Spatial models for estimating species-specific forest biomass across local to continental scales. April 2025. International Association for Landscape Ecology North America Annual Meeting. Raleigh, NC, USA. Oral presentation.
- Doser, J.W.** Advances in spatial models for quantifying forest attributes. April 2025. North Carolina State University Department of Forestry and Environmental Resources Seminar Series. Raleigh, NC, USA. Oral presentation.
- Doser, J.W.**, Saunders, S.P., Reault, S., Bateman, B.L., Grand, J., Zipkin, E.F. July 2024. Using integrated community occupancy models to quantify global change impacts on North American bird communities. International Statistical Ecology Conference. Swansea, Wales, UK. Oral Presentation.

OTHER PRE-
SENTATIONS

- Doser, J.W.**, Leuenberger, W., Sillett, T.S., Hallworth, M.T., Zipkin, E.F. August 2022. Integrated community occupancy models: A framework to assess occurrence and biodiversity dynamics using multiple data sources. Ecological Society of America. Montréal, Canada. Oral presentation.
- Doser, J.W.**, Leuenberger, W., Sillett, T.S., Hallworth, M.T., Zipkin, E.F. June 2022. Integrated community occupancy models: A framework to assess occurrence and biodiversity dynamics using multiple data sources. International Statistical Ecology Conference. Remote. Oral presentation.
- Doser, J.W.**, Weed, A.S., Zipkin, E.F., Miller, K.M., Finley, A.O. July 2021. Trends in bird abundance differ among protected forests but not bird guilds. American Ornithological Society Meeting. Remote. Oral presentation.
- Doser, J.W.**, Finley, A.O., Kasten, E. P., Gage, S. H. June 2021. Assessing soundscape disturbance through hierarchical models and acoustic indices: A case study on a shelterwood logged northern Michigan forest. International Ecoacoustics Congress. Remote. Oral presentation.
- Doser, J.W.**, Weed, A.S., Zipkin, E.F., Miller, K.M., Finley, A.O. May 2021. Trends in bird abundance differ among protected forests but not bird guilds. Ecology, Evolution, and Behavior Program Symposium. Michigan State University. Remote. ***Awarded 2nd Place for Best Oral Presentation.***
- Doser, J.W.** February 2021. Forest bird monitoring using acoustic recordings and hierarchical models. Hanover Seminar Series. Department of Forestry. Michigan State University. Oral presentation.
- Doser, J.W.**, Finley, A.O., Kasten, E. P., Gage, S. H. February 2020. Assessing soundscape disturbance through hierarchical models and acoustic indices: A case study on a shelterwood logged northern Michigan forest. Department of Forestry Graduate Student Symposium. Michigan State University. Oral presentation.
- Doser, J.W.**, Hannam, K.M., Finley, A.O. September 2019. Using hierarchical Bayesian models to analyze acoustic data. XXVII International Bioacoustics Congress, Brighton, England. Oral presentation.
- Doser, J.W.**, Hannam, K.M., Finley, A.O. May 2019. Characterizing functional relationships between biophony and technophony: a western New York soundscape case study. Northeast Regional Environmental Acoustics Symposium. Providence, RI. Oral presentation.
- Doser, J.W.**, Meisel, D.D. April 2018. Developing an automated bird song recognition system using wavelets and simple machine learning techniques. Geneseo Recognizing Excellence, Achievement and Talent Day, Geneseo, NY. Oral presentation.
- Doser, J.W.**, Hannam, K.M. October 2017. Using soundscape maps to assess a local soundscape. Middle States Division American Association of Geographers Annual Meeting, Geneseo, NY. Poster presentation.
- Doser, J.W.**, Hannam, K.M. April 2017. Analysis of seasonal temporal variation of soundscapes in western New York. Northeast Natural History Conference, Cromwell, CT. Oral presentation.
- Doser, J.W.**, Hannam, K.M. August 2016. Use of soundscape recordings to analyze daily temporal variation in avian vocalizations in western New York. North American Ornithological Conference, Washington D.C. Poster presentation.

PROFESSIONAL
POSITIONS

- | | |
|--|-----------|
| <i>Statistical Consultant</i> , Michigan State University | 2019-2020 |
| <ul style="list-style-type: none"> • College of Agriculture and Natural Resources Statistical Consulting Center • Provided statistical and programming guidance to undergraduate students, graduate students, and faculty members. | |
| <i>Student Database Programmer</i> , SUNY Geneseo | 2016-2018 |
| <ul style="list-style-type: none"> • Computing and Information Technologies Department • Developed, modified, and tested Banner applications using SQL, Groovy, SQR, and the Argos Enterprise Reporting System | |

RELEVANT SKILLS *Programming Languages/Statistical Software: R, C++, C, JAGS, NIMBLE, Stan Software: Latex/Knitr, R Markdown/bookdown, R Shiny*

GRADUATE STUDENTS AND POSTDOCS MENTORED

Advisor

- Alexa Busby, PhD student, Fisheries, Wildlife, and Conservation Biology. 2025-ongoing.
- Darius Ledbetter, PhD student, Forestry and Environmental Resources. 2025-ongoing.
- Dr. Michelle Pretorius, Postdoc, 2025-ongoing.

Committee member

- Laura Arango, Ph.D., NCSU, Forestry and Environmental Resources. Ongoing.
- Titilayo Tajudeen, Ph.D., NCSU, Forestry and Environmental Resources. Ongoing.
- Reid Pitts, M.S., NCSU, Forestry and Environmental Resources. Ongoing.
- Dana Lotz, M.S., NCSU, Fisheries, Wildlife, and Conservation Biology. Ongoing.
- Grace Schilling, M.S., NCSU, Fisheries, Wildlife, and Conservation Biology. Ongoing.
- Will Harrod, Ph.D., NCSU, Fisheries, Wildlife, and Conservation Biology. Ongoing.
- Travis Howell, Ph.D., NCSU, Forestry and Environmental Resources. Ongoing.
- Kailee Bergee, Ph.D., NCSU, Fisheries, Wildlife, and Conservation Biology. Ongoing.
- Richard Manner, Ph.D., NCSU, Forestry and Environmental Resources. Ongoing.
- J.T. Larkin, Ph.D., UMass Amherst, Forest Resources. Ongoing.
- Steven Starr, M.S., NCSU, Fisheries, Wildlife, and Conservation Biology. 2025
- Tessa Snyder, M.S., NCSU, Forestry and Environmental Resources. 2025.
- Harry Weisbecker, M.F., NCSU, Forestry and Environmental Resources. 2025.
- Darius Ledbetter, M.S., NCSU, Forestry and Environmental Resources. 2025

Students mentored as a postdoc

- Bruna Amaral, Michigan State University 2022-2024
- Wendy Leuenberger, Michigan State University 2022-2024
- Vladimir Kovalenko, University of Montana 2022-2023
- Samuel Ayebare, Michigan State University 2022

AFFILIATIONS

Society of American Foresters	2025-current
American Statistical Association	2019-2022, 2024-current
Ecological Society of America	2021-current
The Wildlife Society	2022-current
American Ornithological Society	2021-2023
International Society of Ecoacoustics	2019-2022

REFERENCES

Andrew O. Finley
Michigan State University
E-mail: finleya@msu.edu

Elise F. Zipkin
Michigan State University
E-mail: ezipkin@msu.edu

Marc Kéry
Swiss Ornithological Institute
E-mail: marc.kery@vogelwarte.ch