**Jonathon J. Valente**

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I am a research ecologist and statistician who uses quantitative tools to answer questions at the intersection of fundamental ecology and applied conservation. My research revolves around three specific themes: (1) improving tools for sampling and modeling species distributions and dynamics; (2) identifying threatened populations and underlying causes; and (3) developing applied conservation and management solutions for species impacted by anthropogenic disturbances. Please visit my website to learn more.

**EDUCATION**

2012-2017 **Ph.D. in Forest Ecosystems and Society**, Oregon State University

2012-2017 **M.S. in Statistics**, Oregon State University

2006-2009 **M.S. in Wildlife Science, minor in Statistics,** Louisiana State University

2001-2004 **B.A. in Zoology and Environmental Science** Miami University

**SELECT PEER-REVIEWED PUBLICATIONS**

**Valente, J.J.**, D.G. Gannon, J. Hightower, H. Kim, K.G. Leimberger, R. Macedo, J. Rousseau, M. Weldy, R.A. Zitomer, L. Fahrig, R.J. Fletcher, J. Wu, and M.G. Betts. (2023). [Toward conciliation in the habitat fragmentation and biodiversity debate](https://link.springer.com/article/10.1007/s10980-023-01708-9). *Landscape Ecology* 38:2717-2730.

**Valente, J.J.**, J.W. Rivers, Z. Yang, S.K. Nelson, J.M. Northrup, D.D. Roby, C.B. Meyer, and M.G. Betts. (2023). [Fragmentation effects on an endangered species across a gradient from the interior to edge of its range](https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.14091?casa_token=D_mLuhpzhoMAAAAA%3ACiMcELwtaCzPY2oXj8-Hf9XRD45YzeAq0RrqT8b-5VNbI3YuPRkvqz9RdBHZwnnghioDWfuuVtPjOQ). *Conservation Biology* 37:e14091.

**Valente, J.J.**, R.E. Bennett, C. Gómez, N.J. Bayly, R.A. Rice, PP. Marra, T.B. Ryder, and T.S. Sillett. (2022). Comparing land-sparing and land-sharing for conserving avian biodiversity in a coffee agroforestry landscape. *Biological Conservation* 270:109568.

Zitomer, R.A.\*, J. Karr, M. Kerstens, L. Perry, K. Ruth, L. Adrean\*, S. Austin, J. Cornelius, J. Dachenhaus\*, J. Dinkins, A. Harrington, H. Kim, T. Owens, C. Revekant, V. Schroeder, C. Sink. **J.J. Valente**, E. Woodis\*, and J.W. Rivers. (2022). [Ten simple rules for getting started with statistics in graduate school](https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1010033). *PLoS Computational Biology* 18:e1010033.

McCune, K.B., **J.J. Valente**, P. Jablonski, S. Lee, and R.R. Ha. (2022). [Social behavior mediates the use of social and personal information in wild jays](https://www.nature.com/articles/s41598-022-06496-x). *Scientific Reports* 12:2494.

Rushing, C.S., T.B. Ryder, **J.J. Valente**, T.S. Sillet, and P.P. Marra (2021). [Empirical tests of habitat selection theory reveal that conspecific density and patch quality, but not patch size, drive long-distance immigration in a wild bird](https://onlinelibrary.wiley.com/doi/full/10.1111/ele.13729). *Ecology Letters* 24:1167-1177.

Betts, M.G., A. Hadley, D. Frey, S. Frey, D. Gannon, S. Harris, H. Kim, K. Leimberger, K. Moriarty, J. Northrup, B. Phalan, J. Rousseau, T. Stokely, **J.J. Valente**, and D. Zarrate-Charry. (2021). [When are hypotheses useful in ecology and evolution?](https://onlinelibrary.wiley.com/doi/10.1002/ece3.7365) *Ecology and Evolution* 11:5762-5776.

**Valente, J.J.**, C.L. LeGrande-Rolls\*, J.W. Rivers, A.M. Tucker, R.A. Fischer, and M.G. Betts (2021). Conspecific attraction for conservation and management of terrestrial breeding birds: current knowledge and future research directions. *Ornithological Applications* 123:duab007.

**Valente, J.J.**, S.K. Nelson, J.W. Rivers, D.D. Roby, and M.G. Betts (2021). [Experimental evidence that social information affects habitat selection in Marbled Murrelets](https://academic.oup.com/auk/advance-article-abstract/doi/10.1093/ornithology/ukaa086/6167858). *Ornithology* 138:ukaa086.

Betts, M.G., C. Wolf, M. Pfeifer, C. Banks-Leite, V. Arroyo-Rodríguez, J. Barlow, D.B. Ribeiro, F. Eigenbrod, R.J. Fletcher, A.S. Hadley, J.E. Hawes, R.D. Holt, B. Klingbeil, U. Kormann, L. Lens, T. Levi, D. Mezger, J.C. Morante-Filho, D. Orme, C.A. Peres, B.T. Phalan, A. Pidgeon, G.F.M. Rangel, W.J. Ripple, E. Slade, E. Somarriba, J. Tobias, J. Tylianakis, J.N. Urbina-Cardona, **J.J. Valente**, J.I. Watling, K. Wells, O.R. Wearn, E. Wood, R. Young, and R.M. Ewers. (2019). [Extinction filters mediate the global effects of fragmentation](https://science.sciencemag.org/content/366/6470/1236.abstract?casa_token=aKpi_Y6G8jYAAAAA:A56ImrcqObWcO9jzjZpNqoKR9PquQOv5ySZ2rJxF98ICy5DJDGC6pBAKIEZkBRCXIHu2dLDFxpDTp44). *Science* 366:1236-1239.

**Valente, J.J.**, K.B. McCune, R.A. Tamulonis\*, E.S. Neipert, and R.A. Fischer. (2019). [Removal pattern mitigates negative, short-term effects of stepwise Russian olive eradication on breeding birds](https://doi.org/10.1002/ecs2.2756). *Ecosphere* 10:e02756.

**Valente, J.J.**, R.A. Fischer, T.B. Ryder, and M.G. Betts. (2019). [Forest fragmentation affects step choices, but not homing paths of fragmentation-sensitive birds in multiple behavioral states](https://doi.org/10.1007/s10980-019-00777-z). *Landscape Ecology* 34:373-388.

**Valente, J.J.**, and M.G. Betts. (2019). [Response to fragmentation by avian communities is mediated by species traits](https://doi.org/10.1111/ddi.12837). *Diversity and Distributions* 25:48-60.

**Valente, J.J.**, R.A. Hutchinson, and M.G. Betts. (2017). [Distinguishing distribution dynamics from temporary emigration with dynamic occupancy models](https://doi.org/10.1111/2041-210X.12840). *Methods in Ecology and Evolution* 8:1707-1716.

Kormann, U., C. Scherber, T. Tscharntke, N. Klein, M. Larbig, **J.J. Valente**, A.S. Hadley and M.G. Betts. (2016). [Corridors restore animal-mediated pollination in fragmented tropical forest landscapes](https://doi.org/10.1098/rspb.2015.2347). *Proceedings of the Royal Society B* 283:20152347.

Hutchinson, R.A., **J.J. Valente**, S.C. Emerson, M.G. Betts, and T.G. Dietterich. (2015). [Penalized likelihood methods improve parameter estimates in occupancy models](https://doi.org/10.1111/2041-210X.12368). *Methods in Ecology and Evolution* 6:949-959.

**Valente, J.J.**, S.L. King, and R.R. Wilson. (2011). [Distribution and habitat associations of breeding secretive marsh birds in Louisiana’s Mississippi Alluvial Valley](https://doi.org/10.1007/s13157-010-0138-3). *Wetlands* 31:1-10.

**RESEARCH GRANTS**

**Valente, J.J.**, and M.G. Betts. (2015-2017). Developing innovative techniques for assisted species dispersal to minimize potential training impacts. Research Cooperative Agreement, U.S. Army Engineer Research and Development Center. $ 139,610

**Valente, J.J.**, R. Gitzen, C. Lepczyk, L. Narine, and J. Willoughby. (2023-2028). Effects of state-sponsored habitat management on Alabama’s wildlife communities: evaluating the past to improve the future. Alabama Department of Conservation and Natural Resources Contract $2,368,157

Fantle-Lepczyk, J., R. Gitzen, and **J.J. Valente**. (2023). Tricolored Bat Surveys on Ft. Benning, Georgia. Department of Defense Contract. $ 113,966