

# JAMES WILLIAM RIVERS

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## EDUCATION

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- 2008 Ph.D., Univ. California, Santa Barbara  
Major: Biology
- 1999 M.S., Kansas State University  
Major: Biology
- 1997 B.S. (Honors), University of Massachusetts  
Major: Wildlife Conservation

## RESEARCH INTERESTS

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Animal vital rates and forest management practices

Ecology and conservation of insect pollinators, especially in managed forest ecosystems

Behavioral and physiological ecology

## ACADEMIC AND RESEARCH-RELATED POSITIONS

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- 2019–present *Assistant Professor of Wildlife Ecology*  
Department of Forest Engineering, Resources, & Management,  
Oregon State University, Corvallis, Oregon
- 2015–2019 *Assistant Professor, Senior Research*  
Department of Forest Ecosystems & Society  
Oregon State University, Corvallis, Oregon
- 2009–2015 *Post-doctoral Research Associate*  
Department of Forest Ecosystems & Society  
Oregon State University, Corvallis, Oregon

**PEER-REFEREED JOURNAL PUBLICATIONS**

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- Rivers, J. W., J. Bailey Guerrero, R. D. Brodeur, G. K. Krutzikowsky, L. J. Adrean, S. A. Heppell, K. C. Jacobson, K. Milligan, S. K. Nelson, D. D. Roby, W. J. Sydeman, L. G. Torres, and J. A. Barth. 2022. Critical research needs for forage fish within inner-shelf marine ecosystems. *Fisheries* 47(5):213–221.
- Zitomer, R., 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. Valente, E. Woodis, and J. W. Rivers. 2022. Ten simple rules for getting started with statistics in graduate school. *PLOS Computational Biology* 18(4):1010033.
- Yang, C., B. Peer, C. Ursino, J. Yu, and J. Rivers. 2022. Editorial: Evolution and function of acoustic and visual signals in avian brood parasitism. *Frontiers in Ecology and Evolution* 10:892373.
- Stokely, T. D., U. G. Kormann, J. Verschuyt, A. J. Kroll, D. Frey, S. H. Harris, D. Mainwaring, D. Maguire, J. Hatten, J. W. Rivers, S. Fitzgerald, and M. G. Betts. 2022. Experimental evaluation of herbicide use on biodiversity, ecosystem services, and timber production tradeoffs in forest plantations. *Journal of Applied Ecology* 59(1):52–66.
- Welke, C. A., B. Graham, R. R. Conover, J. W. Rivers, and T. M. Burg. 2021. Habitat-linked genetic structure for White-crowned Sparrow (*Zonotrichia leucophrys*): local factors shape population genetic structure. *Ecology and Evolution* 11(17):11700–11717.
- Lajoie, J. L., L. M. Gaino, and J. W. Rivers. 2021. Experimentally induced flight costs do not lead to increased reliance on supplemental food in winter by a small songbird. *Journal of Avian Biology* 52(9):e02782.
- Kormann, U. G., T. D. Stokely, J. Verschuyt, A. J. Kroll, S. Harris, D. Maguire, D. Mainwaring, J. W. Rivers, and M. G. Betts. 2021. Reconciling biodiversity with timber production and revenue via an intensive forest management experiment. *Ecological Applications* 31(8):e02441.
- Rivers, J. W., and M. G. Betts. 2021. Post-harvest bee diversity is high but declines rapidly with stand age in regenerating Douglas-fir forest. *Forest Science* 67(3):275-285.
- 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. *Ornithology* 138(2):ukaa086.
- Valente, J. J., C. L. LeGrande-Rolls, J. W. Rivers, A. M. Tucker, R. A. Fisher, and M. G. Betts. 2021. Conspecific attraction for conservation and management of terrestrial breeding birds: current knowledge and future research directions. *Ornithological Applications* 123(2):duab007.
- Galbraith, S. M., J. H. Cane, and J. W. Rivers. 2021. Wildfire severity influences offspring sex ratio in a native solitary bee. *Oecologia* 195(1):65-75.

- Rivers, J. W., K. M. Jones, and M. G. Betts. 2020. Neither forest herbicides nor ambient temperature exert strong effects on reproductive output of a cavity-nesting songbird. 2020. *Avian Conservation and Ecology* 15(1):18.
- Betts, M. G., J. M. Northrup, J. A. Bailey Guerrero, L. J. Adrean, S. K. Nelson, J. L. Fisher, B. D. Gerber, M.-S. Garcia-Heras, Z. Yang, D. D. Roby, and J. W. Rivers. 2020. Squeezed by a habitat split: warm ocean conditions and old-forest loss interact to reduce long-term occupancy of a threatened seabird. *Conservation Letters* 13(5):e12745.
- Rivers, J. W., J. Verschuyt, C. J. Schwarz, A. J. Kroll, and M. G. Betts. 2019. No evidence of a demographic response to experimental herbicide treatments by an early successional forest bird. *Condor* 121(2):duz004.
- Galbraith, S. M., J. H. Cane, A. R. Moldenke, and J. W. Rivers. 2019. Salvage logging reduces wild bee diversity, but not abundance, in severely burned mixed-conifer forest. *Forest Ecology and Management* 453:117622.
- Galbraith, S. M. J. H. Cane, A. R. Moldenke, and J. W. Rivers. 2019. Wild bee diversity increases with local fire severity in a fire-prone landscape. *Ecosphere* 10(4):e02668.
- Lajoie, J. M., L. M. Gaino, and J. W. Rivers. 2019. Individual variation and seasonality drive bird feeder use during winter in a Mediterranean climate *Ecology and Evolution* 9(5):2535–2549.
- Northrup, J. M., J. W. Rivers, Z. Yang, and M. G. Betts. 2019. Synergistic effects of climate and land-use change influence broad-scale avian population declines. *Global Change Biology* 25(5):1561–1575.
- Rivers, J. W., S. M. Galbraith, J. H. Cane, C. B. Schultz, M. D. Ulyshen, and U. G. Kormann. 2018. A review of research needs for pollinators in managed conifer forests. *Journal of Forestry* 116(6):563–572.
- Rivers, J. W., C. L. Mathis, A. R. Moldenke, and M. G. Betts. 2018. Wild bee diversity is enhanced by experimental removal of timber harvest residue within intensively managed conifer forest. *GCB Bioenergy* 10(10):766–781.
- Hardt, B. M., D. R. Ardia, M. J. Bashaw, and J. W. Rivers. 2018. Experimental brood enlargement differentially influences corticosterone expression in sympatric, ecologically similar songbirds. *Functional Ecology* 32(8):2008–2018.
- Barry, A. M., J. C. Hagar, and J. W. Rivers. 2018. Use of created snags by cavity-nesting birds across 25 years. *Journal of Wildlife Management* 82(7):1376–1384.
- Jones, K. M., J. W. Rivers, and M. G. Betts. 2018. Herbicides exert weak and variable effects on microclimate in early-seral forests. *Northwest Science* 92(2):107–118.

- Northrup, J. M., J. W. Rivers, S. K. Nelson, D. D. Roby, and M. G. Betts. 2018. Assessing the utility of satellite transmitters for identifying nest locations and foraging behavior of the threatened Marbled Murrelet *Brachyramphus marmoratus*. *Marine Ornithology* 46(1):47–55.
- Rivers, J. W., G. N. Newberry, C. J. Schwarz, and D. R. Ardia. 2017. Success despite the stress: violet-green swallows increase glucocorticoids and maintain reproductive output following experimental increases in flight costs. *Functional Ecology* 31(1):235–244.
- Rivers, J. W., J. L. Houtz, B. M. Horton, and M. G. Betts. 2017. No evidence for a link between forest herbicides and offspring sex ratio in a migratory songbird using high-throughput molecular sexing. *Conservation Physiology* 5(1):cox054.
- Barry, A. M., J. C. Hagar, and J. W. Rivers. 2017. Long-term dynamics and characteristics of snags created for wildlife habitat. *Forest Ecology and Management* 403:145–151.
- Rivers, J. W., and B. D. Peer. 2016. Relatedness constrains virulence in an obligate avian brood parasite. *Ornithological Science* 15(2):191–201.
- Liu, W.-C., J. W. Rivers, and D. J. White. 2016. Vocal matching and intensity of begging calls are associated with a forebrain song circuit in a generalist brood parasite. *Developmental Neurobiology* 76(6):615–625.
- Rivers, J. W., M. Johnson, S. M. Haig, C. J. Schwarz, J. Burnett, J. Brandt, D. George, and J. Grantham. 2014. An analysis of monthly home range size in the critically endangered California Condor. *Bird Conservation International* 24(4):492–504.
- Rivers, J. W., M. A. Blundell, and S. I. Rothstein. 2014. Mismatched begging displays between foreign and host offspring reduce brood parasite fitness. *Behavioral Ecology* 25(4):785–793.
- Rivers, J. W., J. M. Johnson, S. M. Haig, C. J. Schwarz, J. W. Glendening, L. J. Burnett, D. George, and J. Grantham. 2014. Resource selection in the California Condor (*Gymnogyps californianus*) relative to terrestrial-based habitats and meteorological conditions. *PLoS ONE* 9(2):e88430.
- Rivers, J. W., A. L. Liebl, L. B. Martin, and M. G. Betts. 2014. Corticosterone in territorial male Swainson's Thrushes varies relative to forest age but not vegetative cover. *Journal of Ornithology* 155(2):539–548.
- Kelly, T. R., J. Grantham, D. George, A. Welch, J. Brandt, L. J. Burnett, K. J. Sorenson, M. Johnson, R. Poppenga, D. Moen, J. Rasico, J. W. Rivers, C. Battistone, and C. K. Johnson. 2014. Spatiotemporal patterns and risk factors for lead exposure in endangered California Condors during 15 years of reintroduction. *Conservation Biology* 28(6):1721–1730.
- Garlick, N. W., G. N. Newberry, and J. W. Rivers. 2014. An assessment of nestling diet composition in the Violet-green Swallow (*Tachycineta thalassina*). *Northwest Science* 88(1):49–54.

- Haig, S. M., J. D'Elia, C. Eagles-Smith, J. Fair, J. Gervais, G. Herring, J. W. Rivers and J. H. Schulz. 2014. The persistent problem of lead poisoning in birds from ammunition and fishing tackle. *The Condor: Ornithological Applications* 116(3):408–428.
- Rivers, J. W., M. A. Blundell, T. M. Loughin, B. D. Peer, and S. I. Rothstein. 2013. The exaggerated begging behavior of an obligate avian brood parasite is shared with a nonparasitic close relative. *Animal Behaviour* 86(3):529–536.
- Peer, B. D., J. W. Rivers, and S. I. Rothstein. 2013. The Brown-headed Cowbird: North America's avian brood parasite. *Chinese Birds* 4(1):93–98.
- Peer, B. D., J. W. Rivers, and S. I. Rothstein. 2013. Cowbirds, conservation, and coevolution: potential misconceptions and directions for future research. *Chinese Birds* 4(1):15–30.
- Rivers, J. W., A. L. Liebl, J. C. Owen, L. B. Martin, and M. G. Betts. 2012. Baseline corticosterone is positively related to juvenile survival in a migrant passerine bird. *Functional Ecology* 26(5):1127–1134.
- Rivers, J. W., S. Young, E. G. Gonzalez, B. Horton, J. Lock, and R. C. Fleischer. 2012. High levels of relatedness between Brown-headed Cowbird (*Molothrus ater*) nestmates in a heavily-parasitized host community. *Auk* 129(4):623–631.
- Jaeckle, W. B., M. Kiefer, B. Childs, R. G. Harper, J. W. Rivers, and B. D. Peer. 2012. Comparison of eggshell porosity and estimated gas flux between the brown-headed cowbird and two common hosts. *Journal of Avian Biology* 43(6):486–490.
- Rivers, J. W., L. B. Martin, A. L. Liebl, and M. G. Betts. 2011. Parental alarm calls of the White-crowned Sparrow fail to stimulate corticosterone production of their nest-bound offspring. *Ethology* 117(5):374–384.
- Rivers, J. W., and D. A. Rintoul. 2011. Fatty acid composition of depot fat of shorebirds collected at mid-continental stopover sites during spring migration. *Journal of Field Ornithology* 82(2):225–231.
- Lupold, S., J. Wistuba, O. S. Damm, J. W. Rivers, and T. R. Birkhead. 2011. Sperm competition leads to functional adaptations in avian testes to maximize sperm quantity and quality. *Reproduction* 141(5):595–605
- Mora, M. A., B. Brattin, C. Baxter, and J. W. Rivers. 2011. Regional and interspecific variation in Sr, Ca, and Sr/Ca ratios in avian eggshells from the USA. *Ecotoxicology* 20(6):1467–1475.
- Rivers, J. W., J. V. Briskie, and S. I. Rothstein. 2010. Have brood parasitic cowbird nestlings caused the evolution of more intense begging by host nestlings? *Animal Behaviour* 80(3):e1–e5.
- Rivers, J. W., W. E. Jensen, K. L. Kosciuch, and S. I. Rothstein. 2010. Community-level patterns of host use by the Brown-headed Cowbird, a generalist brood parasite. *Auk* 127(2):263–273.

- Rivers, J. W., P. S. Gipson, D. P. Althoff, and J. S. Pontius. 2010. Long-term community dynamics of small landbirds with and without exposure to extensive disturbance from military training activities. *Environmental Management* 45(2):203–216.
- Rivers, J. W., T. M. Loughin, and S. I. Rothstein. 2010. Brown-headed cowbird nestlings influence nestmate begging, but not parental feeding, in hosts of three distinct sizes. *Animal Behaviour* 79(1):107–116.
- Betts, M. G., J. C. Hagar, J. W. Rivers, J. D. Alexander, K. McGarigal, and B. C. McComb. 2010. Thresholds in forest bird occurrence as a function of the amount of early seral broadleaf forest at landscape scales. *Ecological Applications* 20(8):2116–2130.
- Rivers, J. W. 2009. Parent-absent begging in the Brown-headed Cowbird (*Molothrus ater*): the role of short-term need and nestmate size. *Behavioral Ecology and Sociobiology* 63(5):707–717.
- Lupold, S., G. M. Linz, J. W. Rivers, D. F. Westneat, and T. R. Birkhead. 2009. Sperm competition selects beyond relative testes size in birds. *Evolution* 63(2):391–402.
- Kosciuch, K. L., J. W. Rivers, and B. K. Sandercock. 2008. Stable isotopes identify the natal origins of a generalist brood parasite, the Brown-headed Cowbird *Molothrus ater*. *Journal of Avian Biology* 39(3):364–367.
- Rivers, J. W. 2007. Nestmate size, but not short-term need, influences the begging behavior of a generalist brood parasite. *Behavioral Ecology* 18(1):222–230.
- Rivers, J. W., and M. J. Kuehn. 2006. Predation of eared grebe by Great Blue Heron. *Wilson Journal of Ornithology* 118(1):112–113.
- Althoff, D. P., J. W. Rivers, J. S. Pontius, P. S. Gipson, and P. B. Woodford. 2005. A comprehensive approach to identifying monitoring priorities of small landbirds on military installations. *Environmental Management* 34(6):887–902.
- Peer, B. D, S. I. Rothstein, and J. W. Rivers. 2005. First record of Bronzed Cowbird parasitism on the Great-tailed Grackle. *Wilson Bulletin* 117(2):194–196.
- Rivers, J. W., and B. K. Sandercock. 2004. Predation by Gray Catbird on Brown Thrasher eggs. *The Southwestern Naturalist* 49(1):101–103.
- Rivers, J. W., and J. V. Briskie. 2003. Lack of sperm production and sperm storage by arctic-nesting shorebirds during spring migration. *Ibis* 145(1):61–66.
- Rivers, J. W., D. P. Althoff, P. S. Gipson, and J. S. Pontius. 2003. Evaluation of a reproductive index to estimate Dickcissel reproductive success. *Journal of Wildlife Management* 67(1):136–144.

Rivers, J. W., and T. T. Cable. 2003. Evaluation of farmed playa wetlands as avian habitat using survey data and two rapid assessment techniques. *The Transactions of the Kansas Academy of Science* 106(3/4):155–165.

Rivers, J. W., T. T. Cable, and J. S. Pontius. 2003. Influence of nest concealment and distance to habitat edge on depredation rates of simulated bird nests in southeast Kansas. *The Transactions of the Kansas Academy of Science* 106(1/2):40–47.

Rivers, J. W. 2000. Northern harrier predation of white-faced ibis. *Wilson Bulletin* 112(3):416–417.

Rivers, J. W., and D. E. Kroodsmas. 2000. Singing behavior of the hermit thrush. *Journal of Field Ornithology* 71(3):467–471.

### **MANUSCRIPTS IN REVIEW**

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Fountain, E. D., P. J. Kulzer, R. T. Golightly, J. W. Rivers, S. F. Pearson, M. G. Raphael, M. G. Betts, S. K. Nelson, D. D. Roby, N. Kryshak, S. Schneider, and M. Z. Peery. Characterizing the diet of a threatened seabird, the Marbled Murrelet, using high-throughput sequencing. *Marine Ornithology*.

Valente, J. J., J. W. Rivers, Z. Yang, S. K. Nelson, J. M. Northrup, D. D. Roby, C. Meyer, and M. G. Betts. Fragmentation effects on an endangered species across a gradient from the interior to edge of its range. *Conservation Biology*.

Zitomer, R. A., S. M. Galbraith, M. G. Betts, A. R. Moldenke, R. A. Progar, and J. W. Rivers. Bee diversity decreases rapidly with time since harvest in intensively managed conifer forests. *Ecological Applications*.

Galbraith, S. M., J. J. Valente, C. J. Dunn, and J. W. Rivers. Both Landsat- and LiDAR-derived measures predict forest bee response to large-scale wildfire. *Remote Sensing in Ecology and Conservation*.

Kerstens, M. E., and J. W. Rivers. Is green the new black? Black-backed Woodpecker vital rates do not differ between unburned and burned forests within a pyrodiverse landscape. *For Ornithological Applications*.

### **PEER-REFEREED BOOK CHAPTERS**

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Peer, B. D., J. W. Rivers, L. Merrill, S. K. Robinson, and S. I. Rothstein. 2018. The Brown-headed Cowbird: a model species for testing novel research questions in animal ecology, evolution and behavior. Pp. 161–187 in *Avian brood parasitism: behavior, ecology, evolution, and coevolution* (M. Soler, editor). Springer.

## TECHNICAL AND NON-REFEREED PUBLICATIONS

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Rivers, J. W. 2002. Book review of *The Red-cockaded Woodpecker: surviving in a fire-dominated ecosystem*. *Wildlife Society Bulletin* 30(2):653–654.

Rivers, J. W., and C. D. Lee. 2001. Biological attributes and economic costs of farmed wetlands in Kansas. Kansas State University Agricultural Experiment Station and Cooperative Extension Service.

Rivers, J. W., T. T. Cable, and C. D. Lee. 2001. Seasonal avian use of farmed Kansas wetlands. Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Report No. 863.

Cable, T. T., J. A. Fox, and J. W. Rivers. 1999. Attitudes of Kansas agricultural producers about riparian areas, wildlife conservation, and endangered species. Kansas State University Agriculture Experiment Station and Cooperative Extension Service, Report No. 830.

Rivers, J. W. 1998. Unusually high rate of barn owl roadkills in Kansas. *Kansas Ornithological Society Bulletin* 49:43–44.

Goheen, J. R., J. W. Rivers, and J. Brunson. 1998. The Conservation and Reinvestment Act and natural resource professionals: an example of the starving man syndrome. *Wildlife Society Bulletin* 26:649–650.

Rivers, J. W. 1997. Options for undergraduates. *Wildlife Society Bulletin* 25:202–203.

## COMPETITIVE RESEARCH GRANTS

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Rivers, J. W., K. Moriarty, and J. Verschuyt. 2022-2025. Evaluating the response of native pollinators to fuel-reduction treatments in managed conifer forests. *California Board of Forestry and Fire Protection*. Amount: \$448,510.

Rivers, J. W. 2021-2023. An experimental evaluation of simulated climate change on population vital rates of a managed pollinator. *Agricultural Research Foundation, Oregon State University*. Amount: \$15,000.

Rivers, J. W. 2019-2020. Assessing the ecological value of snags created intentionally as wildlife habitat. *USDI Bureau of Land Management*. Amount: \$100,000.

Rivers, J. W. 2019-2022. Development of native bee identification keys for the Pacific Northwest. *Fish and Wildlife Habitat in Managed Forests Research Program, College of Forestry, Oregon State University*. Amount: \$125,405.

Rivers, J. W., M. G. Betts, S. M. Galbraith, U. Kormann, A. R. Moldenke, C. W. Epps, S. Kincaid, and R. Progar. 2018-2020. The role of managed forests in promoting pollinator biodiversity, health, and pollination services to wild plants and agricultural crops. *National Institute of Food and*



*Agriculture, Agriculture and Food Research Initiative, U.S. Department of Agriculture.* Amount: \$1,000,000.

Rivers, J. W., and J. Verschuyf. 2018-2020. Black-backed Woodpecker vital rates in unburned and burned forest within a fire-prone landscape. *Fish and Wildlife Habitat in Managed Forests Research Program, College of Forestry, Oregon State University.* Amount: \$95,217.

Hovland, M., J. Dinkins, J. W. Rivers, and N. Sanchez. 2018-2022. Using applied science to identify best practices in sagebrush ecosystems. *USDI Bureau of Land Management.* Amount: \$98,992.

Krawchuk, M., M. G. Betts, J. W. Rivers, A.J. Kroll, J. Verschuyf, and M. Swanson. 2018-2021. Biodiversity in natural and managed early seral forests of Southern Oregon. *Fish and Wildlife Habitat in Managed Forests Research Program, College of Forestry, Oregon State University.* Amount: \$148,625.

Rivers, J. W. 2016-2018. Assessing pollinator response to natural and anthropogenic disturbances in mixed-conifer forests. *USDI Bureau of Land Management.* Amount: \$320,000.

Rivers, J. W., and J. H. Cane. 2016-2018. Assessing pollinator response to natural and anthropogenic disturbances in mixed-conifer forests. *Fish and Wildlife Habitat in Managed Forests Research Program, College of Forestry, Oregon State University.* Amount: \$99,712.

Rivers, J. W., and J. C. Hagar. 2015-2017. Revisiting the CFIRP: Assessing long-term ecological value and characteristics of snags created for wildlife. *Fish and Wildlife Habitat in Managed Forests Research Program, College of Forestry, Oregon State University.* Amount: \$57,818.

Betts, M. G., J. P. Verschuyf, J. W. Rivers, D. Maguire, D. Mainwaring, J. Hatten, P. Phalan, T. Stokely, S. Fitzgerald, G. S. Latta, and M. Needham. 2015-2017. Quantifying trade-offs and synergies between ecosystem services in intensively managed forests. *Institute for Working Forest Landscapes, College of Forestry, Oregon State University.* Amount: \$249,930.

Betts, M. G., J. A. Hatten, J. W. Rivers, J. P. Verschuyf, C. A. Montgomery, and G. S. Latta. 2015-2017. Quantifying tradeoffs and synergies between ecosystem services and intensive forest management. *Agriculture and Food Research Initiative, U.S. Department of Agriculture.* Amount: \$499,145.

Betts, M. G., and J. W. Rivers. 2014-2016. Assessing the demographic response of early seral songbird species to intensive forest management. *Fish and Wildlife Habitat in Managed Forests Research Program, College of Forestry, Oregon State University.* Amount: \$76,933.

Rivers, J. W., and M. G. Betts. 2013. Assessing the consequences of herbicide use on animal pollinators in early seral forests. *College of Forestry, Oregon State University.* Amount: \$25,000.

Rivers, J. W., and M. G. Betts. 2013. Quantifying the consequences of herbicides on animal pollinators in regenerating forest habitats of western Oregon. *Katherine Bisbee II Conservation Fund, Oregon Community Foundation.* Amount: \$2,442.

McComb, B. C., J. W. Rivers, and D. R. Ardia. 2011-2012. How costly are coping styles? Using heart rate telemetry to quantify energetic costs mounted in response to environmental stressors in wild songbirds. *Oregon State University General Research Fund*. Amount: \$10,000.

Rivers, J. W. 2011. Measuring the physiological response of cavity-nesting songbirds to environmental stressors using heart-rate telemetry. *North American Bluebird Society*. Amount: \$2,500 (+\$500 additional from *New York State Bluebird Society*).

Betts, M. G., D. Wilson, J. W. Rivers, S. Fitzgerald, D. Maguire, R. Rose, and J. Johnson. 2009-2011. Quantifying trade-offs between biodiversity conservation and timber production in intensively managed forests. *Agriculture and Food Research Initiative, U.S. Department of Agriculture*. Amount: \$497,677.

Rothstein, S. I., and J. W. Rivers. 2006. An experimental, comparative investigation to assess the extent and consequences of nestling behavioral adaptations in a recently evolved brood parasite. *National Science Foundation*. Amount: \$9,300.

Rothstein, S. I., and J. W. Rivers. 2006. Assessing the extent of nestling adaptations in a recently evolved brood parasite. *Academic Senate Council, University of California, Santa Barbara*. Amount: \$9,000.

#### **NON-COMPETITIVE RESEARCH GRANTS**

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Rivers, J. W. 2022. Assessing potential food resources of the Black-backed Woodpecker in green forests. *Oregon Department of Forestry*. Amount: \$5,000.

Rivers, J. W. and M. E. Kerstens 2022. Quantifying food availability of breeding Black-backed Woodpeckers. *East Cascades Audubon Society*. Amount: \$2,500.

Betts, M. G., and J. W. Rivers. 2020-2025. Automatic acoustic classification of Marbled Murrelets and forest songbirds using deep learning. *USDA Forest Service, Pacific Northwest Research Station*. Amount: \$189,955.

Rivers, J. W., M. G. Betts, S. K. Nelson, and D. D. Roby. 2015-2023. Predictors of space use and reproductive success in the Marbled Murrelet. *Joint Natural Resources Committee on Ways and Means, Oregon State Legislature. Appropriation to Forest Research Laboratory, College of Forestry, Oregon State University*. Amount: \$11,877,900.

Rivers, J. W. 2019. Forest pollinator workshop. *USDA Forest Service*. Amount: \$1,500.

Rivers, J. W. 2019. A workshop for developing a standardized sampling protocol for forest pollinators. *Oregon Department of Forestry*. Amount: \$2,520.

Rivers, J. W. 2018-2022. Black-backed Woodpecker demographic rates in an understudied habitat: unburned conifer forest. *National Council for Air and Stream Improvement*. Amount: \$125,000.

Rivers, J. W. 2018-2019. Black-backed Woodpecker nest surveys within a fire-prone landscape. *Oregon Department of Forestry*. Amount: \$59,998.

Krawchuk, M., M. G. Betts, M. Swanson, and J. W. Rivers. 2017-2018. Biodiversity in natural and managed early seral forests of southern Oregon. *National Council for Air and Stream Improvement*. Amount: \$20,000.

Rivers, J. W. 2016-2018. Assessing pollinator response to natural and anthropogenic disturbances in mixed-conifer forests. *Mealey/Boise Cascade/Boone and Crockett/Noble Endowment Fund, College of Forestry, Oregon State University*. Amount: \$100,000.

Betts, M. G., and J. W. Rivers. 2016. Intensive Forest Management Study: early seral bird demography and database management. *National Council for Air and Stream Improvement*. Amount: \$33,630.

Rivers, J. W. 2015-2016. Assessing long-term ecological value and characteristics of snags created for wildlife. *College Forests, Oregon State University*. Amount: \$5,000.

Rivers, J. W. 2015-2016. Wildlife surveys in forest ecosystems. *U.S. Geological Survey Cooperative Project Award*. Amount: \$18,994.

Rivers, J. W., and M. G. Betts. 2014. Assessing the impact of intensive management practices on songbird demography in the Pacific Northwest. *National Council for Air and Stream Improvement*. Amount: \$68,040.

Betts, M. G., and J. W. Rivers. 2014. Quantifying intensive management impacts on songbird demography in the Pacific Northwest. *National Council for Air and Stream Improvement*. Amount: \$35,000.

Betts, M. G., and J. W. Rivers. 2013. Assessing the impact of intensively managed plantations on bird demography and in the Pacific Northwest. *National Council for Air and Stream Improvement*. Amount: \$30,000.

## **AWARDS, HONORS, AND DISTINCTIONS**

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**Research Award**, Oregon Society of American Foresters (2020). This award is presented in recognition of outstanding achievement in any branch of science leading to advancement in either the science or practice of forestry in Oregon.

**Vice Provost's Outreach and Engagement Awards of Excellence**, Honorable Mention; Division of University Outreach and Engagement, Oregon State University (2016).

**Fellow**, American Ornithological Society (2015). This recognizes exceptional and sustained contributions to ornithology and/or service to the American Ornithological Society (formerly the American Ornithologists' Union).

**Dean's Award for Outstanding Achievement**, College of Forestry, Oregon State University (2015). This award given in recognition for outstanding efforts in research, teaching, and mentoring in wildlife-forestry research as a faculty research assistant.

**Ned K. Johnson Young Investigator Award**, American Ornithological Society (2012). This award recognizes researchers who have made outstanding and promising ornithological contributions early in their career and show a distinct promise for leadership in the field of ornithology.

**Certified Wildlife Biologist**, The Wildlife Society (2010).

**Elective Member**, American Ornithological Society (2007).

**Student Presentation Award**, Honorable Mention. 4<sup>th</sup> North American Ornithological Conference, Veracruz, Mexico (in top 5% of ~470 student presentations; 2006).

**GSA Excellence in Teaching Award**, Honorable Mention, Graduate Student Association, University of California, Santa Barbara (2005).

**Associate Wildlife Biologist**, The Wildlife Society (2001).

**Elective Member**, Sigma Xi (1998).

**Elective Member**, Xi Sigma Pi Honor Society (1997).

**Commonwealth Scholar**, Honors Program, University of Massachusetts (1996).

**Student Leadership Award**, Rocky Mountain Elk Foundation (1996).

## PRESENTATIONS AT SCIENTIFIC CONFERENCES

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Michlanski, M. J. Sanders, J. W. Rivers, K. Yates, and B. Beechler. 2022. Consequences of parasitism in a threatened population of marbled murrelets on the Oregon Coast. Contributed oral presentation at the annual Boehringer Ingelheim National Veterinary Scholars Symposium, St. Paul, MN.

Zitomer, R., S. Galbraith, and J. W. Rivers. 2022. Forest age and floral resource availability drive native bee abundance and diversity in intensively managed forests of the Oregon Coast Range. Invited oral presentation at the annual meeting of the Northwest Scientific Association <virtual>.

Kerstens, M. E., and J. W. Rivers. 2022. Moving between green and black: natal dispersal and survival of juvenile Black-backed Woodpeckers (*Picoides arcticus*). Contributed oral presentation at the

annual meeting of the Oregon chapter of The Wildlife Society, Newport, OR.

Padgett, I., R. Zitomer, and J. W. Rivers. 2022. An evaluation of bee body size across a gradient of managed early seral conifer forests. Contributed poster presentation at the annual meeting of the Oregon chapter of The Wildlife Society, Newport, OR.

Valente, J. J., S. K. Nelson, J. Dachenhaus, E. Woodis, J. A. Bailey Guerrero, D. D. Roby, M. G. Betts, and J. W. Rivers. 2022. Estimating the detectability of breeding behaviors at known Marbled Murrelet (*Brachyramphus marmoratus*) nest sites. Contributed oral presentation at the annual meeting of the Pacific Seabird Group <virtual>.

Woodis, E. W., J. J. Valente, S. K. Nelson, D. D. Roby, M. G. Betts, J. C. Dachenhaus, J. A. Bailey Guerrero, and J. W. Rivers. 2022. An assessment of factors that influence nest success of the Marbled Murrelet (*Brachyramphus marmoratus*). Contributed oral presentation at the annual meeting of the Pacific Seabird Group <virtual>.

Dachenhaus, J. C., S. K. Nelson, D. D. Roby, M. G. Betts, E. W. Woodis, J. A. Bailey Guerrero, J. J. Valente, L. J. Adrean, and J. W. Rivers. 2022. Chick provisioning rates and nesting success of the Marbled Murrelet (*Brachyramphus marmoratus*). Contributed oral presentation at the annual meeting of the Pacific Seabird Group <virtual>.

Ponisio, L., H. Cohen, S. Galbraith, and J. W. Rivers. 2021. *Osmia lignaria* parasitism and reproduction in clearcuts. Invited oral presentation at the annual conference of the Orchard Bee Association, Corvallis, OR.

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. Contributed oral presentation at the annual meeting of the American Ornithologists Society <virtual>.

Smith, D. J., K. M. Silber, E. J. Williams, S. K. Winnicki, P. E. Klug, K. L. Kosciuch, W. E. Jensen, J. W. Rivers, B. F. Sousa, B. K. Sandercock, and W. A. Boyle. 2021. Local grassland bird declines were not explained by long-term changes in reproductive output. Contributed oral presentation at the annual meeting of the American Ornithologists Society <virtual>.

Adrean, L. J., J. J. Valente, J. B. Guerrero, S. K. Nelson, D. D. Roby, E. W. Woodis, M. G. Betts, and J. W. Rivers. 2021. Evaluating the influence of fluctuating ocean conditions on foraging ecology and breeding activity of a threatened seabird. Contributed oral presentation at the annual meeting of the Pacific Seabird Group <virtual>.

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. Contributed oral presentation at the annual meeting of the Pacific Seabird Group <virtual>.

Rivers, J. W., S. M. Galbraith, R. Progar, A. R. Moldenke, and M. G. Betts. 2020. Assessing the value of intensively managed conifer forests for supporting pollinator populations. Invited oral

presentation at the annual meeting of the Oregon chapter of The Wildlife Society, Eugene, OR.

Garcia-Heras, M.-S., L. Adrean, J. A. Bailey Guerrero, S. K. Nelson, D. D. Roby, M. G. Betts, J. Dachenhaus, E. Woodis, and J. W. Rivers. 2020. Spatial and temporal variation in marine space use of Marbled Murrelet (*Brachyramphus marmoratus*) along the Oregon coast. Contributed oral presentation at the annual meeting of the Oregon chapter of The Wildlife Society, Eugene, OR.

Dachenhaus, J. C., L. J. Adrean, S. K. Nelson, D. D. Roby, M. G. Betts, E. Woodis, J. A. Bailey Guerrero, and J. W. Rivers. 2020. Use of video cameras to quantify chick provisioning rates in the Marbled Murrelet (*Brachyramphus marmoratus*). Contributed poster presentation at the annual meeting of the Oregon chapter of The Wildlife Society, Eugene, OR.

Woodis, E. W., M. E. Hunsicker, Y. Gong, S. K. Nelson, D. D. Roby, M. G. Betts, J. C. Dachenhaus, L. J. Adrean, J. A. Bailey Guerrero, and J. W. Rivers. 2020. Using stable isotope analysis to document the effects of warming oceans on diet of the Marbled Murrelet (*Brachyramphus marmoratus*). Contributed poster presentation at the annual meeting of the Oregon chapter of The Wildlife Society, Eugene, OR.

Rivers, J. W. 2020 Evaluating pollinator health in intensively managed conifer forests. Invited oral presentation at the annual meeting of the Oregon Forest Health Conference, Corvallis, OR.

Betts, M. G., J. M. Northrup, J. A. Bailey Guerrero, L. J. Adrean, S. K. Nelson, J. L. Fisher, B. D. Gerber, M.-S. Garcia-Heras, Z. Yang, D. D. Roby, and J. W. Rivers. 2020. Squeezed by a habitat split: warm ocean conditions and old-forest loss interact to reduce long-term occupancy of the threatened Marbled Murrelet. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, Portland, OR.

Dachenhaus, J. C., L. J. Adrean, S. K. Nelson, D. D. Roby, M. G. Betts, E. Woodis, J. A. Bailey Guerrero, and J. W. Rivers. 2020. Use of video cameras to quantify chick provisioning rates in the Marbled Murrelet (*Brachyramphus marmoratus*). Contributed poster presentation at the annual meeting of the Pacific Seabird Group, Portland, OR.

Woodis, E. W., M. E. Hunsicker, Y. Gong, S. K. Nelson, D. D. Roby, M. G. Betts, J. C. Dachenhaus, L. J. Adrean, J. A. Bailey Guerrero, and J. W. Rivers. 2020. Using stable isotope analysis to document the effects of warming oceans on diet of the Marbled Murrelet (*Brachyramphus marmoratus*). Contributed poster presentation at the annual meeting of the Pacific Seabird Group, Portland, OR.

Garcia-Heras, M.-S., L. J. Adrean, M. J. Stuber, J. Dachenhaus, and J. W. Rivers. 2020. Bald Eagles and seabirds: new evidence reveals predation events on an endangered alcid, the Marbled Murrelet (*Brachyramphus marmoratus*), and other species along the central Oregon Coast. Contributed poster presentation at the annual meeting of the Pacific Seabird Group, Portland, OR.

Fountain, E. D., R. T. Golightly, J. W. Rivers, S. K. Nelson, M. G. Betts, D. D. Roby, and M. Z. Peery. 2020. Harnessing the power of next-generation sequencing to characterize the diet of Marbled

- Murrelets (*Brachyramphus marmoratus*). Contributed oral presentation at the annual meeting of the Pacific Seabird Group, Portland, OR.
- Garcia-Heras, M.-S., L. Adrean, J. A. Bailey Guerrero, S. K. Nelson, D. D. Roby, M. G. Betts, J. C. Dachenhaus, E. W. Woodis, and J. W. Rivers. 2020. Spatio-temporal variation in marine space use of the endangered Marbled Murrelet (*Brachyramphus marmoratus*) in Oregon. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, Portland, OR.
- Rivers, J. W. 2019. A review of pollinator research needs in managed forests of the Pacific Northwest. Invited oral presentation at the Forest Pollinator Sampling Workshop, High Desert Museum, Bend, OR.
- Rivers, J. W. 2019. An overview and introduction to the forest pollinator sampling workshop. Invited oral presentation at the Forest Pollinator Sampling Workshop, High Desert Museum, Bend, OR.
- Rivers, J. W. 2019. An overview and introduction to the forage fish workshop. Invited oral presentation at the Forage Fish Workshop: Connecting the Land and Sea, Newport, OR.
- Galbraith, S. M., M. G. Betts, R. Progar, A. R. Moldenke, and J. W. Rivers. 2019. The influence of forest management on pollinator communities in the Oregon Coast Range. Invited oral presentation at the annual meeting of the Entomological Society of America, St. Louis, MO.
- Zitomer, R. A., S. M. Galbraith, and J. W. Rivers. 2019. Where (and when) are bumble bees in intensively managed conifer forests? Contributed poster presentation at BOMBUSS 2.0: Building our methods by using sound science, next steps in North American bumble bee monitoring and conservation, Toronto, Canada.
- Garcia-Heras, M.-S., L. J. Adrean, M. J. Stuber, J. Dachenhaus, and J. W. Rivers. 2019. Bald Eagles and seabirds: new evidence reveals predation events on an endangered alcid, the Marbled Murrelet (*Brachyramphus marmoratus*), and other species along the central Oregon Coast. Contributed poster presentation at the annual meeting of the Raptor Research Foundation, Ft. Collins, CO.
- Tishendorf, R., M. Brawner, D. Taylor, J. W. Rivers, and R. Terry. 2019. Investigating resource partitioning between two species of swallows using stable isotope analysis. Contributed poster presentation at the OSU Undergraduate Research Symposium, Corvallis, OR.
- Zarifah, N., G. Wood, S. Galbraith, and J. W. Rivers. 2019. The effect of stand age on emergence rate and cocoon mass of *Osmia lignaria* in managed conifer forests. Contributed poster presentation at the OSU Undergraduate Research Symposium, Corvallis, OR.
- Wood, Giulia, N. Zarifah, S. Galbraith, and J. W. Rivers. 2019. The effect of time since harvest on body size of *Osmia lignaria* in managed conifer forests. Poster presentation at the OSU Celebrating Undergraduate Excellence Conference, Corvallis, OR.
- DelToro, K., S. M. Galbraith, and J. W. Rivers. 2019. Demographic response of a native bee to a natural mosaic of forest wildfire severity. Contributed oral presentation at the annual meeting

of the Pacific Northwest Louis Stokes Alliances for Minority Participation, Seattle, WA.

Galbraith, S. M., M. G. Betts, R. Progar, A. R. Moldenke, and J. W. Rivers. 2019. The influence of conifer forest management on pollinator communities in the Pacific Northwestern U.S. Contributed poster presentation at the International Pollinator Conference, Davis, CA.

Garcia-Heras, M.-S., L. J. Adrean, S. K. Nelson, D. D. Roby, M. G. Betts, and J. W. Rivers. 2019. Breeding season movements and marine habitat use by the Marbled Murrelet (*Brachyramphus marmoratus*) in Oregon. Invited oral presentation at the annual meeting of the American Ornithological Society, Anchorage, AK.

Rivers, J. W., L. J. Adrean, S. K. Nelson, M.-S. Garcia-Heras, D. D. Roby, and M. G. Betts. 2019. Factors associated with Marbled Murrelet (*Brachyramphus marmoratus*) nesting success in western Oregon. Invited oral presentation at the annual meeting of the American Ornithological Society, Anchorage, AK.

Rivers, J. W. 2019. Seeing the (early seral) forest for the bees: research needs for pollinators in managed forests of the Pacific Northwest. Invited oral presentation at Early Seral Biodiversity Science and Management Workshop, Oregon State University, Corvallis, OR.

Rivers, J. W. 2019. Can trees be the bee's knees? Opportunities for pollinator research in managed forests of the Pacific Northwest. Invited oral presentation at Pacific Northwest Pollinator Summit and Conference, Oregon State University, Corvallis, OR.

Garcia-Heras, M.-S., L. J. Adrean, S. K. Nelson, D. D. Roby, M. G. Betts, and J. W. Rivers. 2019. Breeding season movements and marine habitat use by the Marbled Murrelet (*Brachyramphus marmoratus*) in Oregon. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, Kauai, HI.

Adrean, L. J., S. K. Nelson, M.-S. Garcia-Heras, D. D. Roby, M. G. Betts, and J. W. Rivers. 2019. Factors associated with Marbled Murrelet (*Brachyramphus marmoratus*) nesting success in western Oregon. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, Kauai, HI.

Rivers, J. W., C. L. Mathis, A. R. Moldenke, and M. G. Betts. 2018. Experimental removal of timber harvest residue enhances wild bee diversity within managed conifer forests. Invited oral presentation at the joint meeting of the Entomological Society of America, Entomological Society of Canada, and the Entomological Society of British Columbia. Vancouver, British Columbia, Canada.

Buhl, C., J. W. Rivers, S. M. Galbraith, J. H. Cane, C. B. Schultz, M. D. Ulyshen, and U. G. Kormann. 2018. Research needs and habitat enhancement measures for pollinators in managed conifer forests. Invited oral presentation at the joint meeting of the Entomological Society of America, Entomological Society of Canada, and the Entomological Society of British Columbia. Vancouver, British Columbia, Canada.



- Galbraith, S. M., J. H. Cane, and J. W. Rivers. 2018. Wild bee reproductive output and sex ratio is influenced by wildfire severity in mixed conifer forest. Invited oral presentation at the joint meeting of the Entomological Society of America, Entomological Society of Canada, and the Entomological Society of British Columbia. Vancouver, British Columbia, Canada.
- Rivers, J. W. 2018. Seeing the forest for the bees: pollinator health research in managed conifer forests of the Pacific Northwest. Invited oral presentation at the annual National Convention for the Society of American Foresters, Portland, OR.
- Harris, S., U. Kormann, T. Stokely, A. Kroll, J. Verschuyl, D. Mainwaring, J. W. Rivers, and M. Betts. 2018. Stand-level tradeoffs between timber production, biodiversity, and pollination services. Invited oral presentation at the annual National Convention for the Society of American Foresters, Portland, OR.
- DelToro, K., S. M. Galbraith, and J. W. Rivers. 2018. Demographic response of a native bee to a natural mosaic of forest wildfire severity. Contributed poster presentation at the annual meeting of the Society for the Advancement of Chicanos and Native Americans in Science, San Antonio, TX.
- Kormann, U., T. Stokely, A. J. Kroll, J. Verschuyl, S. Harris, J. W. Rivers, D. Mainwaring, D. Maguire, and M. G. Betts. 2018. Forest biodiversity trades off against timber production but not revenue in the Oregon Coast Range. Contributed oral presentation at the annual meeting of the Ecological Society of Germany, Austria and Switzerland, Vienna, Austria.
- Bell, N., S. Galbraith, A. Moldenke, and J. W. Rivers. 2018. Quantifying the influence of wildfire severity on offspring food provisions in a native bee. Poster presentation at the OSU Undergraduate Research Symposium, Corvallis, OR.
- DelToro, K., S. M. Galbraith, and J. W. Rivers. 2018. Demographic response of a native bee to a natural mosaic of forest wildfire severity. Poster presentation at the OSU Undergraduate Research Symposium, Corvallis, OR.
- Rivers, J. W. 2018. Can trees be the bee's knees? The emergence of pollinator research in managed conifer forests. Invited oral presentation at the annual meeting of the Oregon Forest Health Conference, Corvallis, OR.
- Galbraith, S. M., J. H. Cane, A. R. Moldenke, and J. W. Rivers. 2018. Bee diversity is linked to wildfire severity in Oregon mixed conifer forest. Invited oral presentation at the annual meeting of the Oregon Forest Health Conference, Corvallis, OR.
- Rivers, J. W., J. Verschuyl, C. J. Schwarz, A. J. Kroll, and M. G. Betts. 2018. Dynamic demographic response to experimental forest herbicide treatments by an early successional songbird. Invited oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Portland, OR.
- Rivers, J. W., S. K. Nelson, L. J. Adrean, C. A. Horton, D. D. Roby, and M. G. Betts. 2018. An update on

the Oregon Marbled Murrelet Project: unexpected results characterize the 2017 breeding season. Contributed oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Portland, OR.

Kormann, U., T. Stokely, A. J. Kroll, J. Verschuyt, S. Harris, D. Mainwaring, J. W. Rivers, and M. G. Betts. 2018. Stand-level tradeoffs between timber production, biodiversity, and ecosystem functions in the Oregon Coast Range. Invited oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Portland, OR.

Galbraith, S. M., J. H. Cane, and J. W. Rivers. 2018. Reproductive response of a native solitary bee across a gradient of forest wildfire severity. Contributed oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Portland, OR.

Horton, C. A., L. J. Adrean, S. K. Nelson, D. D. Roby, M. G. Betts, and J. W. Rivers. 2018. Anomalous ocean conditions coincide with a lack of nesting activity in Marbled Murrelets in Oregon. Contributed poster presentation at the annual meeting of the American Ornithological Society, Tucson, AZ.

Hardt, B. M., D. R. Ardia, M. J. Bashaw, and J. W. Rivers. 2018. Brood size differentially affects the nestling stress response in sympatric swallows, but does not impact growth or survival. Contributed oral presentation at the annual meeting of the American Ornithological Society, Tucson, AZ.

Strong, C. S., R. T. Golightly, S. K. Nelson, C. A. Horton, L. J. Adrean, and J. W. Rivers. 2018. Bailing on the California Current: Marbled Murrelet and other seabird response to unusual conditions in Oregon and Northern California. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, La Paz, Mexico.

Adrean, L. J., S. K. Nelson, C. A. Horton, D. D. Roby, M. G. Betts, and J. W. Rivers. 2018. Radio-tagging reveals unprecedented breeding season movements of Marbled Murrelets. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, La Paz, Mexico.

Horton, C. A., L. J. Adrean, S. K. Nelson, D. D. Roby, M. G. Betts, and J. W. Rivers. 2018. Anomalous ocean conditions coincide with a lack of nesting activity in Marbled Murrelets in Oregon. Contributed poster presentation at the annual meeting of the Pacific Seabird Group, La Paz, Mexico.

Nelson, S. K., J. M. Northrup, J. W. Rivers, D. D. Roby, and M. G. Betts. 2018. Climate change, habitat loss, and predators affect the recent distribution of Marbled Murrelets in the Pacific Northwest. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, La Paz, Mexico.

Northrup, J. M., J. W. Rivers, Z. Yang, and M. G. Betts. 2018. Synergistic effects of climate and land-use change on animal population dynamics. Contributed oral presentation at the annual meeting of the North American Congress for Conservation Biology, Toronto, Ontario, Canada.

- Rivers, J. W., L. Adrean, M. Pickett, B. Taggart, S. K. Nelson, D. D. Roby, and M. G. Betts. 2017. Testing whether unmanned aerial vehicles can be used to locate cryptic nests of the Marbled Murrelet. Contributed oral presentation at the annual meeting of the American Ornithological Society, East Lansing, MI.
- Barry, A. M., J. C. Hagar, and J. W. Rivers. 2017. If you build it, who will come? Assessing use of created snags by cavity-nesting birds across 25 years. Invited oral presentation at the annual meeting of the American Ornithological Society, East Lansing, MI.
- Galbraith, S. M., J. H. Cane, A. R. Moldenke, and J. W. Rivers. 2017. Bee diversity is linked to wildfire severity and salvage logging in Oregon mixed-conifer forest. Contributed oral presentation at the annual meeting of the Ecological Society of America, Portland, OR.
- Galbraith, S. M., J. H. Cane, and J. W. Rivers. 2017. The influence of wildfire burn severity and post-fire management on bee community composition in mixed-conifer forest. Invited oral presentation at the annual meeting of the Pacific Branch of the Entomological Society of America, Portland, OR.
- Pickett, M. H., B. K. Taggart, J. W. Rivers, L. J. Adrean, and S. K. Nelson. 2017. Utilizing UAS to locate nesting seabirds within the canopy of mature forests. Contributed oral presentation at the annual meeting of the Association for Unmanned Vehicle Systems International, Dallas, TX.
- Rivers, J. W., C. L. Mathis, A. R. Moldenke, and M. G. Betts. 2017. Assessing the effects of post-harvest biomass removal on early-successional forest bee communities. Invited oral presentation at Pollinators in Managed Forest Landscapes Workshop, Oregon State University, Corvallis, OR.
- Galbraith, S. M., J. H. Cane, and J. W. Rivers. 2017. The influence of wildfire severity and post-fire management on pollinator communities in mixed-conifer forest. Invited oral presentation at Pollinators in Managed Forest Landscapes Workshop, Oregon State University, Corvallis, OR.
- Kormann, U., J. W. Rivers, M. Scherr, and M. G. Betts. 2017. Pollinator community response to stand-level herbicide treatment. Invited oral presentation at Pollinators in Managed Forest Landscapes Workshop, Oregon State University, Corvallis, OR.
- Rivers, J. W., L. J. Adrean, M. Pickett, B. Taggart, S. K. Nelson, D. D. Roby, and M. G. Betts. 2017. Testing whether unmanned aerial vehicles can be used to locate cryptic nests of the Marbled Murrelet. Contributed oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Pendleton, OR.
- Galbraith, S. M., J. H. Cane, and J. W. Rivers. 2017. The influence of wildfire severity and post-fire management on pollinator communities in a mixed-conifer forest. Contributed oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Pendleton, OR.
- Northrup, J. M., J. W. Rivers, S. K. Nelson, D. D. Roby, L. J. Adrean, and M. G. Betts. 2017.

Spatiotemporal patterns of corvid distribution and abundance in areas occupied by Marbled Murrelets. Contributed oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Pendleton, OR.

Barry, A. M., J. C. Hagar, and J. W. Rivers. 2017. Created snag dynamics and influence on cavity-nesting bird communities over 25 years in western Oregon. Contributed oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Pendleton, OR.

Adrean, L. J., S. K. Nelson, J. M. Northrup, D. D. Roby, M. G. Betts, and J. W. Rivers. 2017. Evaluating space use and reproductive success of the threatened Marbled Murrelet in western Oregon. Contributed oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Pendleton, OR.

Adrean, L. J., M. Pickett, B. Taggart, S. K. Nelson, D. D. Roby, M. G. Betts and J. W. Rivers. 2017. Testing whether unmanned aerial vehicles can be used to locate cryptic nests of the Marbled Murrelet. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, Tacoma, WA.

Northrup, J. M., J. W. Rivers, S. K. Nelson, D. D. Roby, L. J. Adrean, and M. G. Betts. 2017. Spatiotemporal patterns of corvid distribution and abundance in areas occupied by Marbled Murrelets. Contributed oral presentation at the annual meeting of the Pacific Seabird Group, Tacoma, WA.

Nelson, S. K., J. M. Northrup, D. D. Roby, M. G. Betts, L. J. Adrean, and J. W. Rivers. 2017. Evaluating space use and reproductive success of the threatened Marbled Murrelet in western Oregon. Contributed poster presentation at the annual meeting of the Pacific Seabird Group, Tacoma, WA.

Rivers, J. W. 2016. Evaluating the effects of intensive forest management on songbird productivity. Invited oral presentation and panel discussion at the annual meeting of the Oregon Forest and Industries Council, Sun River, OR.

Rivers, J. W. 2016. Testing the impact of experimental herbicide treatments on breeding productivity of early-successional forest songbirds. Invited oral presentation at the annual meeting of the Pacific Northwest Reforestation Council, Vancouver, WA.

Rivers, J. W., M. G. Betts, S. K. Nelson, and D. D. Roby. 2016. Predictors of space use and reproductive success in the Marbled Murrelet. Invited oral presentation at the annual West Coast Regional Meeting of The National Council for Air and Stream Improvement, Inc., Vancouver, WA.

Barry, A. M., J. C. Hagar, and J. W. Rivers. 2016. Created snag dynamics and impacts on cavity-nesting bird communities over 25 years in western Oregon. Invited oral presentation at the annual West Coast Regional Meeting of The National Council for Air and Stream Improvement, Inc., Vancouver, WA.

Rivers, J. W., J. M. Northrup, M. G. Betts, S. K. Nelson, and D. D. Roby. 2016. Evaluating space use and

reproductive success of the threatened Marbled Murrelet in western Oregon. Contributed poster presentation at the North American Ornithological Conference, Washington, D.C.

Houtz, J. L., J. W. Rivers, J. W., B. M. Horton, and M. G. Betts. 2016. Evaluating the influence of forest herbicides on offspring sex ratio in an early-successional forest songbird. Contributed poster presentation at the annual Pennsylvania State System of Higher Education Undergraduate Research Conference in Science, Technology, Engineering, and Mathematics, Millersville, PA.

Houtz, J. L., J. W. Rivers, J. W., B. M. Horton, and M. G. Betts. 2016. Evaluating the influence of forest herbicides on offspring sex ratio in an early-successional forest songbird. Contributed poster presentation at the North American Ornithological Conference, Washington, D.C.

Rivers, J. W., M. G. Betts, A. J. Kroll, C. J. Schwarz, and J. Verschuyt. 2015. Songbird demographic response to herbicide application in early-seral forest. Contributed oral presentation at the annual meeting of the American Ornithological Society, Norman, OK.

Rivers, J. W., J. Verschuyt, A. J. Kroll, and M. G. Betts. 2015. The influence of intensive forest management practices on breeding success of the White-crowned Sparrow, an early-seral songbird. Invited oral presentation at annual meeting of the Oregon Chapter of The Wildlife Society, Eugene, OR.

Rivers, J. W., J. Verschuyt, A. J. Kroll, and M. G. Betts. 2015. Quantifying tradeoffs between biodiversity and timber production in western Oregon: an overview of the Intensive Forest Management (IFM) study. Invited oral presentation at the annual meeting of the Washington Chapter of The Wildlife Society, Grand Mound, WA.

Rivers, J. W., J. Verschuyt, A. J. Kroll, and M. G. Betts. 2015. The influence of intensive forest management on breeding success of an early-seral songbird. Invited oral presentation at the annual meeting of the Washington Chapter of The Wildlife Society, Grand Mound, WA.

Mathis, C. L., J. W. Rivers, and M. G. Betts. 2015. Assessing the influence of organic biofuel removal on bee diversity in early-seral production forests. Contributed poster presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Eugene, OR.

Hardt, B., J. W. Rivers, D. R. Ardia, and M. J. Bashaw. 2015. Assessing the role of corticosterone in regulating the stress response in *Tachycineta* swallows. Contributed poster presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Eugene, OR.

Rivers, J. W., J. Verschuyt, A. J. Kroll, C. J. Schwarz, and M. G. Betts. 2014. Invited oral presentation at Wildlife in Managed Forests: Songbirds and Early Seral Habitats Workshop, Oregon Forests Research Institute, Albany, OR.

Verschuyt, J., M. G. Betts, J. W. Rivers, J. Giovanini, and A. J. Kroll. 2014. Invited oral presentation at Wildlife in Managed Forests: Songbirds and Early Seral Habitats Workshop, Oregon Forests Research Institute, Albany, OR.

- Rivers, J. W., and M. G. Betts. 2014. Intensive forest management practices reduce nest survival and offspring production: evidence from a landscape-scale experiment. Contributed oral presentation at the annual meeting of the American Ornithological Society, Estes Park, CO.
- Jones, K. N., J. W. Rivers, and M. B. Betts. 2014. Effects of intensive forest management on reproductive success in a cavity-nesting songbird. Contributed poster presentation at the 2014 at the annual meeting of the American Ornithological Society, Estes Park, CO.
- Rivers, J. W., J. Verschuyf, A. J. Kroll, and M. G. Betts. 2014. Quantifying the demographic consequences of intensive management practices on breeding birds in early seral plantation forests. Invited oral presentation at the annual meeting of the Oregon Chapter of The Wildlife Society, Bend, OR.
- Verschuyf, J., M. G. Betts, K. Jones, J. W. Rivers, and A. J. Kroll. 2014. A manipulative study of the effects of forest herbicide use on nest success of early seral birds. Contributed oral presentation at the annual meeting of the Washington Chapter of The Wildlife Society, Pasco, WA.
- Rivers, J. W., J. Verschuyf, A. J. Kroll, and M. G. Betts. 2013. Avian demography across a gradient of management intensity in early seral plantation forests. Invited oral presentation at the annual West Coast Regional Meeting of The National Council for Air and Stream Improvement, Inc., Vancouver, WA.
- Rivers, J. W., M. A. Blundell, and S. I. Rothstein. 2013. Begging displays of Brown-headed Cowbird nestlings are insufficient to maximize food provisioning by a small host. Invited oral presentation at the annual meeting of the American Ornithological Society, Chicago, IL.
- Rothstein, S. I., B. D. Peer, J. W. Rivers, and R. C. Fleischer. 2013. New and old directions in the study of brood parasitism: from Herbert Friedman to modern phylogenetics. Invited oral presentation at the annual meeting of the American Ornithological Society, Chicago, IL.
- Peer, B. D., J. W. Rivers, and S. I. Rothstein. 2012. Cowbirds, conservation, and coevolution: potential misconceptions and directions for future research. Invited oral presentation at the International Symposium on Avian Brood Parasitism, Hainan, China.
- Rivers, J. W., G. Newberry, and D. R. Ardia. 2012. Divergent responses to an extreme stressor in two sympatric *Tachycineta* swallows. Contributed poster presentation at the North American Ornithological Conference, Vancouver, British Columbia, Canada.
- Newberry, G. N., and J. W. Rivers. 2012. Differences in diet composition of coexisting Violet-green and Tree Swallows during offspring provisioning. Contributed poster presentation at the North American Ornithological Conference, Vancouver, British Columbia, Canada.
- Rivers, J. W., M. Johnson, C. J. Schwarz, J. Brandt, J. Burnett, D. George, and S. M. Haig. 2012. An assessment of home range size in the California Condor across the annual cycle. Invited oral presentation at the California Condor Partner's Meeting, Portland, OR.

- Rivers, J. W., M. G. Betts, A. L. Liebl, J. C. Owen, and L. B. Martin. 2010. Assessing whether the corticosterone stress response predicts post-fledging survival in a temperate passerine. Contributed poster presentation at the annual meeting of the American Ornithological Society, San Diego, CA.
- Vesely, D. G., M. G. Betts, D. Smith, and J. W. Rivers. 2010. Use of conservation detection dogs to assist in passerine nest searches. Contributed oral presentation at the annual Research Advances in Fisheries, Wildlife, and Ecology Symposium, Corvallis, OR.
- Rivers, J. W., L. B. Martin, A. L. Liebl, and M. G. Betts. 2009. Alarm calls of White-crowned Sparrow parents fail to stimulate corticosterone production in their offspring. Contributed oral presentation at the annual meeting of the American Ornithological Society, Philadelphia, PA.
- Mora, M. A., B. Brattin, C. Baxter, and J. W. Rivers. 2009. Ecotoxicological implications of Sr accumulation in eggshells of birds from North America. Contributed poster presentation at the meeting of the Society of Environmental Toxicology and Chemistry, Göteborg, Sweden.
- Rivers, J. W., B. D. Peer, and S. I. Rothstein. 2008. Assessing whether exaggerated begging behavior in the Brown-headed Cowbird is an adaptation for brood parasitism. Contributed poster presentation at the International Behavioral Ecology Congress, Ithaca, NY.
- Lupold, S., J. W. Rivers, G. M. Linz, D. F. Westneat, and T. R. Birkhead. 2008. Post-copulatory sexual selection shaping sperm and testes in birds. Contributed oral presentation at the International Behavioral Ecology Congress, Ithaca, NY.
- Peer, B. D., R. G. Harper, J. W. Rivers, and J. Frick. 2008. Acceptance of cowbird parasitism by Dickcissels: is pesticide thinning of eggshells to blame? Contributed poster presentation at the 12<sup>th</sup> International Behavioral Ecology Congress, Ithaca, NY.
- Rivers, J. W., B. D. Peer, and S. I. Rothstein. 2008. Begging behavior of the Brown-headed Cowbird: notable as a nest parasite, or boring like a blackbird? Contributed oral presentation at the annual meeting of the American Ornithological Society, Portland, OR.
- Rivers, J. W., W. E. Jensen, K. L. Kosciuch, and S. I. Rothstein. 2008. Community-level patterns of host use by the Brown-headed Cowbird, a generalist brood parasite. Contributed poster presentation at the annual meeting of the American Ornithological Society, Portland, OR.
- Blundell, M. A., J. W. Rivers, and S. I. Rothstein. 2008. Brown-headed Cowbird begging and feeding by host parents: does exaggerated begging lead to exaggerated provisioning? Contributed oral presentation at the annual meeting of the American Ornithological Society, Portland, OR.
- Blundell, M. A., J. W. Rivers, and S. I. Rothstein. 2008. Begging behavior of Brown-headed Cowbird chicks: does exaggerated begging lead to exaggerated provisioning? Contributed poster presentation at the annual meeting of the Society for the Advancement of Chicanos and Native Americans in Science Conference, Salt Lake City, UT.

- Rivers, J. W., W. E. Jensen, K. L. Kosciuch, and S. I. Rothstein. 2007. Community-level patterns of host use by the Brown-headed Cowbird, a generalist brood parasite. Invited oral presentation at the Australasian Ornithological Conference, Perth, Australia.
- Peer, B. D., R. G. Harper, J. W. Rivers, J. W. Frick, M. D. Benson, M. Anderson, B. Blackwell, T. Eshedagho, J. Raabe, B. Wall, and E. Wear. 2007. Implications of organochlorine contamination on brood parasite-host coevolution. Invited poster presentation at the Australasian Ornithological Conference, Perth, Australia.
- Rivers, J. W., W. E. Jensen, K. L. Kosciuch, and S. I. Rothstein. 2007. Community-level patterns of host use by a generalist brood parasite. Contributed poster presentation at the annual meeting of the American Ornithological Society, Laramie, WY.
- Kosciuch, K. L., J. W. Rivers, and B. K. Sandercock. 2007. Stable isotopes identify the natal origins of a generalist brood parasite. Contributed poster presentation at the annual meeting of the American Ornithological Society, Laramie, WY.
- Peer, B. D., R. G. Harper, J. W. Rivers, J. W. Frick, M. D. Benson, M. Anderson, B. Blackwell, T. Eshedagho, J. Raabe, B. Wall, and E. Wear. 2007. Dickcissels, DDT, and cowbirds: an evolutionary equilibrium? Contributed oral presentation at the annual meeting of the American Ornithological Society, Laramie, WY.
- Rivers, J. W. and S. I. Rothstein. 2007. Exaggerated begging is not an adaptation for brood parasitism in the Brown-headed Cowbird. Contributed oral presentation at the annual meeting of The Wilson Ornithological Society, Boston, MA.
- Kosciuch, K. L., J. W. Rivers, and B. K. Sandercock. 2007. Stable isotopes identify the natal origins of a generalist brood parasite. Contributed poster presentation at the annual meeting of The Wilson Ornithological Society, Boston, MA.
- Rivers, J. W., and S. I. Rothstein. 2006. Comparative evidence indicates exaggerated begging behavior by nestling Brown-headed Cowbirds is not a unique adaptation for brood parasitism. Contributed oral presentation at the annual meeting of the Animal Behavior Society, Snowbird, UT.
- Rivers, J. W. and S. I. Rothstein. 2006. Assessing whether the exaggerated begging of a generalist brood parasite is an adaptation for brood parasitism. Contributed oral presentation at the North American Ornithological Conference, Veracruz, Mexico.
- Peer, B. D., R. G. Harper, J. W. Rivers, J. W. Frick, J. Raabe, B. Blackwell, M. Anderson, and E. Wear. 2006. Does organochlorine contamination in Dickcissel eggs force them to accept cowbird parasitism? Contributed poster presentation at the North American Ornithological Conference, Veracruz, Mexico.



- Rivers, J. W., and S. I. Rothstein. 2005. The influence of hunger on begging behavior in the Brown-headed Cowbird. Contributed poster presentation at the annual meeting of the American Ornithological Society, Santa Barbara, CA.
- Rivers, J. W., S. Young, E. Gonzalez, and R. C. Fleischer. 2005. Evidence for sibling relatedness in nests multiply-parasitized by Brown-headed Cowbirds. Contributed poster presentation at the annual Southern California Animal Behavior Symposium, Riverside, CA.
- Rivers, J. W. 2004. The influence of nestmate size on begging behavior in Brown-headed Cowbirds. Invited oral presentation at the annual meeting of the American Ornithological Society, Quebec City, Quebec, Canada.
- Rivers, J. W., S. Young, E. Gonzalez, and R. C. Fleischer. 2004. Evidence for sibling relatedness in nests multiply-parasitized by Brown-headed Cowbirds. Contributed poster presentation at the annual meeting of the American Ornithological Society, Quebec City, Quebec, Canada.
- Rivers, J. W. 2003. An investigation of the proximate factors that influence begging behavior in nestling Brown-headed Cowbirds. Contributed oral presentation at the annual meeting of the American Ornithological Society, Urbana-Champaign, IL.
- Rivers, J. W., D. P. Althoff, P. S. Gipson, and J. S. Pontius. 2002. Evaluation of a reproductive index to estimate Dickcissel reproductive success. Contributed oral presentation at the North American Ornithological Conference, New Orleans, LA.
- Rivers, J. W., D. P. Althoff, P. S. Gipson, J. S. Pontius, and A. Abuzeineh. 2001. Evaluation of an index method to measure Dickcissel breeding success in northeastern Kansas. Contributed oral presentation at the annual meeting Midwest Fish and Wildlife Conference, Des Moines, IA.
- Rivers, J. W. and J. V. Briskie. 2001. Lack of sperm production and sperm storage by arctic-nesting shorebirds during spring migration. Contributed oral presentation at the annual meeting of The Wilson Ornithological Society, Fayetteville, AR.
- Rivers, J. W., D. P. Althoff, P. S. Gipson, P. B. Woodford, and J. S. Pontius. 2001. Long-term population trends of grassland birds on Ft. Riley, Kansas. Contributed poster presentation at the annual meeting of the Cooper Ornithological Society, Albuquerque, NM.
- Althoff, D. P., J. W. Rivers, P. S. Gipson, P. B. Woodford, and J. S. Pontius. 2001. Monitoring and evaluating long-term population trends of small landbirds on Fort Riley Military Installation, Kansas, 1991-2000. Contributed oral presentation at the Integrated Training Area Management Conference Nashville, TN.
- Althoff, D. P., J. W. Rivers, P. S. Gipson, P. B. Woodford, and J. S. Pontius. 2001. Evaluation of long-term population trends of small landbirds on Fort Riley Military Installation, Kansas. Contributed oral presentation at the annual meeting of The Wildlife Society, Reno/Tahoe, NV.

- Rivers, J. W., T. T. Cable, and J. S. Pontius. 2000. House Sparrow eggs in artificial nests overestimate Dickcissel nest predation rates. Contributed oral presentation at the annual conference of The Wildlife Society, Nashville, TN.
- Rivers, J. W., T. T. Cable, and P. S. Gipson. 2000. Avian use of farmed wetlands in Kansas. Contributed poster presentation at the International Symposium on Society and Resource Management, Bellingham, WA.
- Rivers, J. W., M. R. Rougès, and T. G. Smith. 1999. A survey of avian ectoparasites from El Rey National Park, Argentina. Contributed oral presentation at the XIX Reunión Argentina de Ecología, San Miguel de Tucumán, Argentina.

### **SYMPOSIA AND WORKSHOPS ORGANIZED**

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- 2022 Co-Organizer, “The Ecological Importance of Forests to Pollinators.” Symposium held at the joint meeting of the Entomological Society of America, the Entomological Society of Canada, and Entomological Society of British Columbia, Vancouver, British Columbia, Canada.
- 2019 Co-Organizer, “Forage Fish Workshop: Connecting the Land and Sea.” Workshop co-organized with OSU Marine Studies Initiative to bring together scientists and managers for outlining collaborative research on nearshore forage fish communities and the upper trophic predators that depend upon them. Newport, OR.
- 2019 Lead Organizer, “Forest Pollinator Sampling Workshop.” Lead organizer for workshop to develop standardized protocol for sampling insect pollinators in forests of the Pacific Northwest. Bend, OR.
- 2019 Co-Organizer, “Survival Analysis for Avian Ecologists: Moving Beyond Mayfield.” Workshop held at the annual meeting of the American Ornithological Society, Anchorage, AK.
- 2019 Co-Organizer, “Movement, space use, and breeding ecology *Brachyrhamphus* murrelets.” Symposium held at the annual meeting of the American Ornithological Society, Anchorage, AK.
- 2018 Co-Organizer, “The Value of Forests to Insect Pollinators.” Symposium held at the joint meeting of the Entomological Society of America, the Entomological Society of Canada, and Entomological Society of British Columbia, Vancouver, British Columbia, Canada.
- 2018 Co-Organizer, “Sustaining Wildlife Populations in Working Forests: Lessons from the Pacific Northwest.” Symposium held at the annual meeting of the Society of American Foresters, Portland, R.
- 2017 Co-Organizer, “Pollinators in Managed Forest Landscapes.” Workshop organized to bring together researchers and resource managers to establish a research agenda for pollinator research within managed forest landscapes. Oregon State University, Corvallis, OR.

- 2017 Co-Organizer, "From Fungi to Fledglings: Cavity-nesting Bird Ecology and Conservation Across North America." Symposium held at the annual meeting of the American Ornithological Society, East Lansing, MI.
- 2007 Co-Organizer, "Ecology and Evolution of Brood Parasitism. 2007. Symposium held at the meeting of the Australasian Ornithological Society, Perth, West Australia.
- 2005 Co-Organizer, "Workshop for New Manuscript Reviewers." Workshop held at the annual meeting of American Ornithological Society, Santa Barbara, CA.
- 2004 Co-Organizer, "Ecology and Evolution of Nestling Begging Behavior." Symposium held at the annual meeting of the American Ornithological Society, Quebec City, Quebec, Canada.
- 2002 Co-Organizer, "Influence of exotic species on biological diversity." Symposium held at the annual meeting of The Wildlife Society, Bismarck, ND.

#### **INVITED ACADEMIC SEMINARS**

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The Wild World of Bees Lecture Series Webinar, Oregon Bee Project (June 2020)  
Stay at Home Lecture Series Webinar, Oregon State University (April 2020)  
Hatfield Marine Science Center, Oregon State University (November 2019)  
Eugene Garden Club, Eugene, Oregon (June 2019)  
Portland Audubon Society, Portland, Oregon (June 2019)  
Department of Forest Engineering, Resources, and Management, Corvallis, OR (January 2019)  
Oregon State University, Department of Fisheries and Wildlife (November 2018)  
Corvallis Science Pub, Corvallis, Oregon (March 2018)  
Society for American Foresters, Mary's Peak Chapter, Corvallis, Oregon (March 2018)  
Drone Week, Oregon State University Drone (June 2017)  
Oregon Audubon Society Council, Corvallis, Oregon (November 2016)  
Annual meeting of the Wild Bird Feeding Industry, Naples, Florida (November 2014)  
Department of Biology, Portland State University (March 2014)  
Oregon State University, Department of Fisheries and Wildlife (March 2013)  
OSU Bird Nerds, Oregon State University (February 2013)  
Corvallis Audubon Society, Corvallis, Oregon (September 2011)  
Oregon State University, Department of Forest Ecosystems and Society (June 2009)  
Oregon State University, Department of Fisheries and Wildlife (January 2008)  
Cornell University, Department of Ecology and Evolution (October 2007)  
Tufts University, Department of Biology (October 2007)  
University of British Columbia, Department of Forest Sciences (October 2007)  
University of Utah, Department of Biology (August 2006)  
Kansas State University, Division of Biology (May 2005)  
Northern Flint Hills Audubon Society, Manhattan, Kansas (October 1999)  
Kansas State University, Dept. Horticulture, Forestry, and Recreational Resources (September 1999)

## INVITED RESEARCH PRESENTATIONS TO EXTERNAL STAKEHOLDERS

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Oregon Board of Forestry, Salem, Oregon (March 2020)  
Oregon Division of State Lands Stakeholder group, Corvallis, OR (November 2019)  
National Council for Air and Stream Improvement Forestry Program Webinar (October 2019, 2021)  
Interagency Pollinator Working Group Webinar (September 2019)  
National Council for Air and Stream Improvement Science Updates, Tillamook, OR (July, 2019)  
Oregon Board of Forestry, Salem, OR (March 2019)  
Olympic Resources Annual Meeting, Grande Ronde, OR (March 2019)  
Oregon Small Woodland Owners Association Annual Meeting, Springfield, OR (June 2018)  
Oregon Small Woodland Owners Association, Benton County chapter, Corvallis, Oregon (March 2018)  
Oregon Department of Fish and Wildlife Commission, Portland, OR (February 2018)  
Oregon Clover Commission, McMinnville, OR (December 2017)  
NOAA, NW Fisheries Science Center, Newport, OR (October 2017)  
Oregon Forest Industries and Council, Salem, OR (September 2017)  
Western Forestry and Conservation Association, Vancouver, WA (October 2016)  
Bureau of Land Management, Roseburg, OR (August 2016)

## SPECIALIZED TRAINING COURSES

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***AniMove Workshop***, Max Planck Institute for Ornithology, Radolfzell, Germany (2018). Two-week long intensive course to develop advanced programming skills for analyzing animal movement and space use data in conjunction with georeferenced spatial data.

***Oregon Bee School***, Oregon State University, Corvallis, Oregon (2018). Week-long intensive laboratory-based course designed to teach identification of bee genera native to Oregon, with an emphasis on the identification of species in the genus *Bombus*.

***The Bee Course***, Southwest Research Station, Portal, Arizona (2014). Ten-day long intensive course designed for biologists whose research, training, or teaching responsibilities require a greater understanding of bee taxonomy. Emphasis on the classification and identification of more than sixty bee genera of North and Central America, and general information applicable to the global bee fauna.

## UNIVERSITY TEACHING

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**Terrestrial Vertebrate Identification and Natural History (FOR 210, 2022–present)**, Department of Forest Engineering, Resources, and Management, Oregon State University. Instructed 3-unit undergraduate course to introduce students to principles of identifying terrestrial vertebrates (birds, mammals, amphibians, and reptiles) and their sign for species found widely distributed in western North America.

**Forest Ecology (FES 341, 2020–present)**, Department of Forest Ecosystems & Society, Oregon State University. Instructed 3-unit undergraduate course to provide a basic understanding of forest ecosystem, including physiological characteristics of trees, succession, climax, and related

concepts, vegetation classification, stand structure, diversity, competition, growth, soils-forests interactions, biomass and nutrient distribution, energy relations, nutrient element dynamics, and the ecology of disturbances.

**Biodiversity Conservation in Managed Forests (FES/FW 452, 2020–present)**, Department of Forest Ecosystems & Society, Oregon State University. Instructed 3-unit undergraduate course to introduce the concepts of, and approaches to, managing forest stands, landscapes and regions to achieve desired habitat conditions for indicator species and conservation of biological diversity.

**Research in Avian Ecology (FOR 599, 2020–present)**, Department of Forest Engineering, Resources, & Management, Oregon State University. Co-instructed 1-unit graduate course to discuss topics related to conducting empirical research on basic biology and conservation of birds.

**Bee Ecology and Evolution (FOR 505, 2021)**, Department of Forest Engineering, Resources, & Management, Oregon State University. Co-instructed 1-unit graduate course to explore the Co-instructed 1-unit graduate course to discuss topics related to undertaking empirical research on the basic ecology and evolution of wild bees.

**Solitary Bee Ecology (FOR 505, 2020)**, Department of Forest Engineering, Resources, & Management, Oregon State University. Co-instructed 1-unit graduate course to explore the biology, evolution, and conservation of solitary bees including solitary bee phylogeny, diversity, life cycles, mating, and foraging behavior.

**Responsible Conduct of Research (GRAD 520, 2014-2015)**, Graduate School, Oregon State University. Instructed 1-unit graduate level course to teach responsible conduct of research for OSU graduate students who conduct scholarly activity during the course of their graduate work. Topics include ethical decision making; human subjects; animal welfare; data acquisition, sharing, and ownership; research misconduct; conflicts of interest; authorship; peer review; mentor/trainee responsibilities; and collaborative science.

**Species Distributions (FS 599, 2013)**, Department of Forest Ecosystems & Society, Oregon State University. Co-instructed 2-unit graduate course designed to provide graduate students with a broad overview of key topics in species distributions, with a focus on fundamental drivers of distributions (e.g., abiotic and biotic environmental features, competition, facilitation) and an introduction to modeling approaches used to predict species distributions in space and time.

**Principles of Fish and Wildlife Conservation (FW 251, 2012)**, Department of Fisheries and Wildlife, Oregon State University. Co-instructed 3-unit sophomore level undergraduate course to understand basic principles underlying the conservation and management of fish and wildlife; examine the social, cultural, and political institutions that affect conservation and management issues; and understand how scientific knowledge and research are used in the conservation and management of our natural resources.

**Mammalogy (FW 317 DE, 2011-2012)**, Department of Fisheries and Wildlife, Oregon State University. Instructed 3-unit upper-level undergraduate distance education course to survey the origins,

evolution, diversity, and adaptations of mammals to diverse environments. Topics include taxonomy, reproduction, sensory perception, physiology, life history, and behavior.

**Animal Personality and Coping Styles (FW 499/599, 2011)**, Department of Fisheries and Wildlife, Oregon State University. Instructed 2-unit upper level undergraduate and graduate student course on the study of animal personality and coping style, with an emphasis on how organisms vary in individual behaviors how variation in behaviors may be adaptive in light of various environmental stressors.

**Ecophysiology of Birds (FW 599, 2011)**, Department of Fisheries and Wildlife, Oregon State University. Co-instructed 1-unit graduate seminar course focused on understanding adaptive variation in ecological physiology of birds, with a focus on how this variation suits divergent lifestyles.

**Wildlife Ecology (FW 481/581, 2010-2011)**, Department of Fisheries and Wildlife, Oregon State University. Instructed 4-unit upper level undergraduate and graduate student course on the study of basic ecological principles and patterns as they relate to the conservation and management of biodiversity, especially factors that influence the distribution and abundance of wildlife.

## GUEST LECTURER

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*Evaluating the suitability of managed forest landscapes for pollinators*, Warnell School of Forestry & Natural Resources, University of Georgia (2022).

*A cognitive science approach to giving better presentations*, Western Forestry Graduate Research Symposium, Oregon State University (2022).

*Conservation of native pollinators in the context of managed forests*, Department of Forest Ecosystems and Society, Oregon State University (2022).

*Ecology and conservation of native pollinators in managed conifer forests*, BioResource Research Program, College of Agricultural Sciences, Oregon State University (2021).

*Biodiversity considerations when managing post-harvest Douglas-fir forests*, Department of Forest Engineering, Resources, and Management, Oregon State University (2021).

*Conservation of native pollinators in the context of managed forests*, Department of Forest Ecosystems and Society, Oregon State University (2021).

*Uncovering the hidden world of a secretive seabird*, Department of Fisheries and Wildlife, Oregon State University (2020).

*A cognitive science approach to improving scientific presentations*, Western Forestry Graduate Research Symposium, Oregon State University (2019).

*Uncovering the hidden world of a secretive seabird, the endangered Marbled Murrelet*, Department of Forest Ecosystems and Society, Oregon State University (2018).

*Posing Research Questions*, Department of Forest Ecosystems and Society, Oregon State University (2014-2018).

*Ornithology*, Division of Biology, Kansas State University (2014).

*Financing Your Graduate Research*, Graduate Division, Oregon State University (2014)

*Avian Conservation and Management*, Department of Fisheries and Wildlife, Oregon State University (2013).

*Sensory Ecology*, Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara (2006).

*Wildlife and Human Interactions*, Division of Biology, Kansas State University (2002).

*Control of Exotic Wildlife in North America*, Division of Biology, Kansas State University (2001).

*Introduction to Natural Resources Management*, Department of Forestry, Horticulture, and Recreational Resources, Kansas State University (1998).

## MENTORING AND ADVISING

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**Dr. Jonathon Valente**, Postdoctoral Scholar, Oregon State University, 2020–2022.

**Dr. Marie-Sophie Garcia-Heras**, Postdoctoral Research Associate, Oregon State University (co-advised with M. Betts), 2018–2020.

**Dr. Sara Galbraith**, Postdoctoral Research Associate, Oregon State University, 2016–2020.

**Dr. Joseph Northrup**, Postdoctoral Research Associate, Oregon State University (co-advised with M. Betts), 2016–2017.

**Rachel Zitomer**, Ph.D. student, Oregon State University, 2018–present.

**Mark Kerstens**, Ph.D. student, Oregon State University, 2020–present.

**Cecelia Frisinger**, M.S. student, Oregon State University, 2022–present.

**Megan Sampognaro**, M.S. student, Oregon State University, 2022–present.

**Ethan Woodis**, M.S. student, Oregon State University (co-advised with M. Betts), 2022–present.

**Janell Lajoie**, M.S. student, Oregon State University (co-advised with L. Gaino), 2015–2018.

**Amy Comstock**, M.S. student, Oregon State University (co-advised with J. Hagar), 2014–2017.

**Kristin Jones**, M.S. student, Oregon State University (co-advised with M. Betts), 2013–2015.

**Jennifer Bailey Guerrero**, Program Manager, Oregon State University, 2017–present.

**Jonathan Dachenhaus**, Faculty Research Associate, Oregon State University, 2019–2022.

**Ethan Woodis**, Faculty Research Associate, Oregon State University, 2019–2022.

**Lindsay Adrean**, Faculty Research Assistant, Oregon State University, 2017–2021.

**Cheryl Horton**, Faculty Research Associate, Oregon State University, 2017–2018.

**Hallie Perlman**, University Honors College student, Oregon State University, 2022–present.

**Lucas Parvin**, University Honors College student, Oregon State University, 2020–2022.

**Nicole Bell**, University Honors College and URSA student, Oregon State University, 2018–2020.

**Braelei Hardt**, University Honors College student, Oregon State University, 2013–2017.

**Rhea Sellitto**, undergraduate SURE student, Oregon State University, 2020–2021.

**Isabella Padgett**, undergraduate SURE student, Oregon State University, 2021–2022.

**Katherine Hassett**, undergraduate URSA student, Oregon State University, 2022–present.

**Mallory Mead**, undergraduate URSA student, Oregon State University, 2020–2021.

**Mina Everingham**, undergraduate URSA student, Oregon State University, 2020–2021.

**Bryna Hymas**, undergraduate STEM Leaders Program student, Oregon State University, 2020.

**Nuha Zarifah**, undergraduate URSA student, Oregon State University, 2019.

**Giulia Wood**, undergraduate URSA student, Oregon State University, 2019.

**Kendra DelToro**, undergraduate URSA student, Oregon State University, 2018.

**Jonah Powell**, undergraduate research assistant, Oregon State University, 2014–2015.

**Codey Mathis**, undergraduate research assistant, Oregon State University, 2013–2015.

**Gretchen Newberry**, undergraduate research assistant, Oregon State University, 2010–2012.

**Niels Garlick**, undergraduate research assistant, Oregon State University, 2012–2013.

**Melissa Blundell**, undergraduate research assistant, Univ. California, Santa Barbara, 2007–2008.

## **EDITORIAL BOARDS**

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**Associate Editor**, *Ornithology* (2014–present)

**Guest Associate Editor**, *Frontiers in Ecology and Evolution* (2020–2022)

**Guest Subject Matter Editor**, *Ecological Applications* (2020)

## **MANUSCRIPT REVIEWS FOR PEER-REVIEWED JOURNALS**

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*American Naturalist, Animal Behaviour, Auk, Avian Biology Research, Behavioral Ecology, Behavioral Ecology and Sociobiology, Biodiversity Conservation, Biological Conservation, Biological Journal of the Linnean Society, Biology Letters, Biota Neotropica, Canadian Journal of Zoology, Condor, Conservation Biology, Conservation Science and Practice, Diversity and Distributions, Ecological Applications, Ecosphere, Environmental Entomology, Ethology, Evolution, Forest Ecology and Management, Frontiers in Ecology and the Environment, Functional Ecology, Great Plains Research, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Avian Biology, Journal of Comparative Psychology, Journal of Ethology, Journal of Evolutionary Biology, Journal of Experimental Biology, Journal of Field Ornithology, Journal of Human-Wildlife Interactions, Journal of Interpretation Research, Journal of Raptor Research, Journal of Wildlife Management, Landscape Ecology, Movement Ecology, Natural Areas Journal, Oecologia, PLoS ONE, The Prairie Naturalist, Proceedings of the Royal Society B: Biological Sciences, Western North American Naturalist, Wildlife Biology, Wildlife Society Bulletin, Wilson Journal of Ornithology.*

## **PROPOSAL REVIEWS FOR COMPETITIVE GRANTS**

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*Biotechnology and Biological Sciences Research Council (UK), Iowa Academy of Science*

## **PROFESSIONAL SERVICE**

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Steering Committee, Wildlife in Managed Forests Program, Oregon Forest Resources Institute (2022–present)

Search Committee, Starker Chair and Assistant Professor of Family Forestry, Department of Forest Engineering, Resources, and Management, Oregon State University (2021–present)

Area of Concentration Lead; Silviculture, Fire, Forest Health, and Biodiversity, Department of Forest Engineering, Resources, and Management, Oregon State University (2021–present)

Laurels Block Grant Program Review Committee, Graduate School, Oregon State University (2021–present)



Pacific Northwest Forest Pollinator Technical Working Group (2018–present)

Oregon Bee Project Advisory Committee (2017–present)

Marbled Murrelet Technical Committee, Marine Subcommittee; Pacific Seabird Group (2017–present)

College of Forestry Research Forests Advisory Committee, Oregon State University (2020–2021)

USDA/EPA Pollinator State of the Science Workshop Participant (2020–2021)

Search Committee, Editor-in-Chief for *Condor* (2018)

Forest Biodiversity Research Network, Executive Committee, College of Forestry, Oregon State University (2016–2019)

Elective Councilor, American Ornithological Society (2014–2017)

Scientific Program Committee, annual meeting of the American Ornithological Society (2016–2017)

North American Ornithological Conference Workshops and Training Opportunities Committee (2015–2016)

College Forests Recreation Planning Committee, College of Forestry, Oregon State University (2014–2015)

Search Committee, Associate Dean for the Graduate School, Oregon State University (2014)

Board Member, Oregon State University Postdoctoral Association (2013–2014)

Special Affairs: Historical Committee, American Ornithological Society (*Chair*, 2012–2014)

North American Ornithological Conference Student Presentation Awards Committee (2012)

Publications Committee, American Ornithological Society (2004–2011)

Publications Task Force, American Ornithological Society (2008–2009)

Early Professionals Committee, American Ornithological Society (2008–2009)

Student Affairs Committee, American Ornithological Society (2004–07; *Chair*, 2005–2007)

Student Affairs Committee, 4<sup>th</sup> North American Ornithological Conference (2005–2006, *co-Chair*)

Graduate Student Advisory Committee, Dept. of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara, CA (2005–2007)

Graduate Student Symposium Committee, Dept. of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara, CA (2005–2006)

Local planning committee for 123<sup>rd</sup> annual meeting of American Ornithological Society (2003–2005)

Professional Awards Task Force, American Ornithological Society (2003–2004)

## PROFESSIONAL SOCIETIES

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American Ornithological Society (1995-present)

Animal Behavior Society (2003-present)

Pacific Seabird Group (2019-present)

The Wildlife Society (1999-present)

## OUTREACH ACTIVITIES

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**Co-Founder and Faculty Advisor.** “Willamette Valley Bird Symposium”, Oregon State University. Developed, planned, and organized a day-long symposium that annually brings together 200+ professionals, students of all ages, and amateurs to celebrate birds and bird research (2014-2022).

**Panel Member,** “Conference Considerations”, Student Affairs Committee, American Ornithological Society. Panel was held to provide input and considerations for students new to attending scientific conferences (2021).

**Field Trip Co-Leader,** Oregon State University. Led day-long field tour to discuss early seral biodiversity science and manage for professional biologists, forests, small woodlot owners, and interested public (2019).

**Guest Instructor,** “Louis Stokes Alliance for Minority Participation Bridge Program”, College of Forestry, Oregon State University. Introduced underrepresented freshman students to methodological techniques used by biologists to track birds in an experiential learning setting (2016-2018, 2021).

**Mentor,** Diversity and Inclusion Travel Award Recipient Program, American Ornithological Society. Provided mentoring to individuals from underrepresented groups and/or those who have made significant contributions towards fostering a diverse and inclusive community at the annual conference (2017-2018).

**Panel Member,** “Undergraduate Research Opportunities”, STEM Leaders Program, Oregon State University. Provided an overview of undergraduate student research and the manner by which students can interact with faculty through mentored research opportunities (2017).

**Panel Member**, “Selecting a Thesis Mentor”, Honors College, Oregon State University. Provided overview of faculty expectations for students planning to undertake thesis research in the Honors College (2017).

**Guest Instructor**, “Explore Your Forests”, College of Forestry, Oregon State University. Introduced high school students to methodological techniques used by wildlife biologists to track animals in an experiential learning setting at the McDonald-Dunn Forest (2016).

**Panel Member**, “Financing Your Graduate Research”, Graduate School, Oregon State University. Workshop held approximately 3 times/year for new graduate students to discuss how to fund graduate research through student grant opportunities (2014-2016).

**Organizer and Moderator**, “Student Success Workshop Series”, OSU Postdoctoral Association and Graduate School, Oregon State University. Developed, organized, and moderated panel discussions on professional development topics for graduate students (2013-2014).

**Project Mentor**, “Capstone Design Project,” School of Mechanical, Industrial, and Manufacturing Engineering, Oregon State University. Worked with student team to design and implement nestbox heating technology for assessing potential climate change impacts on birds (2013).

**Panel Member**, “Developing a Productive Relationship With Your Mentor”, Graduate School, Oregon State University. Panel was held during orientation for incoming graduate students to provide insights regarding important steps to take to avoid pitfalls and enhance the student-mentor relationship during graduate school (2013).

**Guest Instructor, STEM Academy**, College of Forestry, Oregon State University. Introduced high school students to field ornithology through experiential learning of the techniques used by wildlife biologists in a field setting at the McDonald-Dunn Forest (2013).

**Field Trip Co-Leader**, Oregon State University and Oregon Forest Resources Institute. Led day-long tour to discuss early seral forest management for professional biologists, forests, small woodlot owners, and interested public (2013).

**Scientific Consultant, Harvard Museum of Natural History**, Harvard University. Served as scientific consultant for nest display exhibit featuring brood parasitism in the Brown-headed Cowbird, contribute to information contained in the exhibit, and provided images of cowbirds and hosts for public display (2007).

**Guest Instructor, Strategies for Ecology Education, Development, and Sustainability (SEEDS) Program**, Ecological Society of America, Kansas State University. Introduced underrepresented undergraduates to the ornithological techniques used to study the behavioral ecology of tallgrass prairie birds in a hands-on format via classroom lecture and field trip to Konza Prairie Biological Station (2006).

**Guest Instructor, Kids in Nature (KIN) Program**, Museum of Systematics and Ecology, University of California, Santa Barbara. Introduced elementary students in the Santa Barbara area to principles of vertebrate ecology and evolution via hands-on laboratory demonstrations focused on avian biology in the Museum of Systematics and Ecology (2005).

**Guest Instructor, Kids do Ecology Program**, National Center for Ecological Analysis and Synthesis. Led field trips, helped students collect insects, and helped elementary students identify insects for project focused on understanding local insect diversity (2003).

**Guest Instructor**, Biology Competition, Kansas State University. Prepared local high school students for high school competition to test general knowledge of avian anatomy, ecology, and identification of birds (2000-2001).