W. ALICE BOYLE

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ACADEMIC APPOINTMENTS

Associate Professor, Division of Biology, Kansas State University	2019-present
Visiting Research Associate, Department of Ecology and Evolutionary Biology, University of Arizona	2019–2020
Assistant Professor, Division of Biology, Kansas State University	2012–2019
Research Associate, Centre for Applied Conservation Research, Department of Forest Sciences, University of British Columbia Supervisor: Dr. K. M. Martin	2011–2012
Natural Sciences and Engineering Research Council (NSERC, Canada) Postdoctoral Fellow, Department of Biology, University of Western Ontario Supervisor: Dr. C.G. Guglielmo. Collaborator: Dr. D. W. Winkler (Cornell)	2009–2011
Helen Battle Postdoctoral Fellow, Department of Biology, University of Western Ontario Supervisors: Dr. C.G. Guglielmo (UWO), D. R. Norris (U. Guelph)	2007–2009

TRAINING

Ph.D., Department of Ecology and Evolutionary Biology, University of	Dec	c 2006
Arizona Minor: School of Natural Resources. Advisers: Dr. J.L. Bronstein		
and Dr. C.J. Conway		
	3.6	1000

B. Mus., University of British Columbia Viola performance, 1st Class May 1990

AWARDS, HONORS AND APPOINTMENTS

KATMA AWARD, American Ornithological Society	2021
ELECTED COUNCIL MEMBER, American Ornithological Society	2020-2023
MARION JENKINS SERVICE AWARD, American Ornithological Society	2019
University-wide faculty Science Communication Award, Kansas	2019
State University	
ELECTED FELLOW of the American Ornithological Society	2017
EDITORIAL BOARD, ESA's open access journal, Ecosphere	2013-2020
ELECTED BOARD MEMBER, Cooper Ornithological Society	2013–2016
ELECTED MEMBER of the American Ornithologists' Union	2013
NED K. JOHNSON YOUNG INVESTIGATOR Award, American Ornithologists' Union	2011
BEST STUDENT PAPER Award in 2010, Organization for Tropical Studies	2011

OUTSTANDING INSTRUCTOR, University of Arizona Alumni Association

2001

PUBLICATIONS

(*denotes Boyle lab graduate students, §denotes undergraduate student, †denotes other students that I mentored)

IN REVIEW/REVISION:

- 48. **Boyle, W.A.** and D. Sullins. Long-distance breeding dispersal in a grassland bird; patterns and climatic drivers. (in revision; first submitted Oct 2020; 70% of contribution Boyle lab).
- 47. *Smith, E.B.., §A.J. Roe, *K.M. Silber, *E.J. Williams, *S.K. Winnicki, and **W.A. Boyle**, Consequences of drought for grassland songbird reproduction. *Ecosphere* (in re-review; first submitted Oct 2020; 100% of contribution Boyle lab)
- 46. †Verheijen, B.H.F, A.N. Erickson, **W.A. Boyle**, §K.S. Leveritte, §L.A. Spahr, *E.J. Williams, *S.K. Winnicki, B.K. Sandercock. Effects of patch-burn grazing on reproductive success of grassland songbirds. *(The Condor) Ornithological Applications* (in re-review; first submitted Aug 2020; 15% of contribution Boyle lab)
- 45. Correll, M.D., J.S. Bernaith-Plaisted, S.G. Somershoe, A. Dwyer, D. Augustine, M. Sather, R. Bloom, A. Beh, H. Berlanga, **W.A. Boyle**, T.L. George, J. Herkert, N. Koper, A. Macias-Duarte, W. van Pelt, O. Ramirez, D. Svingen, E.H. Strasser, I. Revulcaba, B. Robinson, J. Sibbing, M. Titulaer, T. VerCautern, and A.O. Panjabi. Ecology, conservation, and management of grassland birds in the Great Plains of North America. *Rangeland Ecology and Management*, INVITED REVIEW (in re-review, first submitted Dec 2018; 5% of contribution Boyle lab)
- 44. *Shogren, E.H., M. Anciães, J. Barske, C. Cestari, E.H. DuVal, M. G. Gaiotti, E. I. Johnson, R. T. Kimball, M.A. Marini, T. B. Ryder, M. N. Scholer, J. Ungvári, S. A. White, **W.A. Boyle**, in revision. Dancing drives evolution of sexual size dimorphism in manakins. *Proceedings of the Royal Society B* (in revision, first submitted Nov 2019; data contributed by multiple authors, 100% of analysis and writing Boyle lab)
- 43. Ryder, B. T., C. Alfonso, C.N. Balakrishnan, J. Barske, M. Bosholn, **W.A. Boyle**, E. L. Braun, I. Chiver, R. Dakin, L. Day, R. Driver, L. Fusani, B. Horton, R. T. Kimball, S. Lipshutz, C. Mello, M. C. Miles, E. Miller, I. Moore, G. Cardenas Posada, B. A. Schlinger, B. Vernasco, M. Webster, M. Wirthlin, and M. J. Fuxjager. Physiological regulatory networks and the evolution of the integrated behavioral phenotype. *Behavioral Ecology*, INVITED REVIEW (in revision; 5% of contribution Boyle lab)
- 42. Hefley, T. J., W.A. Boyle, and †N. M. Mohankumar. Accounting for location uncertainty in distance sampling data. *Methods in Ecology and Evolution* (in revision, first submitted Apr 2019; 10% of effort Boyle lab)

PUBLISHED PEER-REVIEWED:

- 41. *Shogren, E.H., M.A. Jones, and **W.A. Boyle**, 2021. Dancing in the rain: environmental drivers of behavioral variability in White-ruffed Manakin courtship. *Integrative and Comparative Biology*, icab085, doi:10.1093/icb/icab085 (100% of contribution Boyle lab)
- 40. *Shogren, E.H. and **W.A. Boyle**, 2021. Spread the word: male manakins advertise the presence of display sites with neighboring competitors. *Journal of Animal Ecology*, 177:147-158, doi: 10.1016/j.anbehav.2021.04.026 (100% of contribution Boyle lab)

39. *Herse, M.R., K. A. With, and **W.A. Boyle**, 2020. Grassland fragmentation affects declining tallgrass prairie birds most where large amounts of grassland remain. *Landscape Ecology*, 2020, 35(12):2791-2804, doi: 10.1007/s10980-020-01064-y (90% of effort Boyle lab; 100% KSU)

- 38. **Boyle, W.A.**, *E.H. Shogren, and J. D. Brawn, 2020. Hygric niches for tropical endotherms. *Trends in Ecology and Evolution*, 35:938-952. doi:10.1016/j.tree.2020.06.011 (95% of effort Boyle lab; 100% KSU). 2021 KATMA AWARD FOR "PROPOSING IDEAS OR TESTING THEORIES THAT REPLACE CURRENT DOGMA OR SETTLED OPINION AND THAT COULD CHANGE THE COURSE OF THINKING ABOUT THE BIOLOGY OF BIRDS."
- 37. Bruckerhoff, L., K. Connell, J. Guinnip, E. Adhikari, A. Godar, K. Gido, **W.A. Boyle**, A. Hope, A. Joern, E. Welti, 2020 Harmony on the prairie? Grassland plant and animal community responses to variation in climate and land management. *Ecology*, e02986. doi:10.1002/ecy.2986 (5% of contribution Boyle lab; 100% KSU)
- 36. †Burnett, K., †M. N. Zipple, †L. T. Phillips, †P. Pawar, L.P. McGuire, and **W.A. Boyle**, 2019. Nocturnal reductions in body temperature in high elevation Neotropical birds. *Tropical Ecology;* doi:10.1007/s42965-019-00051-y (40% of effort Boyle lab; 100% of effort KSU)
- 35. *Winnicki, S. K., §S. M. Munguía, *E.J. Williams, and **W.A. Boyle**, 2020. Social interactions do not drive territory aggregation in a grassland songbird. *Ecology* doi:0.1002/ecy.2927 (100% of contribution Boyle lab; 100% KSU)
- 34. *Williams, E. J., and **W.A. Boyle**, 2019. Causes and consequences of avian dispersal decisions in a dynamic grassland environment. *Animal Behaviour*, 155:77-87. doi:10.1016/j.anbehav.2019.06.009 (100% of contribution Boyle lab; 100% KSU)
- 33. **Boyle, W.A.** and *E.H. Shogren, 2019. Sex and deception: a rare example of cheating in a lek-breeding tropical bird. *J. Ethology*, 37:151-155; doi:10.1007/s10164-019-00592-8 (100% of effort Boyle lab; 100% of effort KSU)
- 32. *Shogren, E.H., †M.A. Jones, B.K. Sandercock, and **W.A. Boyle**, 2019. Apparent survival of tropical birds in a wet, premontane forest in Costa Rica. *J. Field Ornithology*, 90:117-127. doi:10.1111/jofo.12290 (80% Boyle lab; data collected pre-KSU but all analyses and writing KSU effort). AFO 2019 BEST STUDENT PAPER AWARD
- 31. **Boyle, W.A.**, 2018. Birds on the move: ecology of migration and dispersal. INVITED TEXTBOOK CHAPTER Pages 613-654 *in Ornithology: Foundation, Critique, and Application*, M. L. Morrison, A. D. Rodewald, G. Voelker, M.R. Colón, and J. F. Prather, Johns Hopkins University Press, Baltimore, MD. (100% effort KSU)
- 30. McGuire, L.P., L.A. Kelly, D.E. Baloun, **W.A. Boyle**, T.L. Cheng, J. Clerc, N.W. Fuller, A.R. Gerson, K.A. Jonasson, E.J. Rogers, and C.G. Guglielmo, 2018. Common condition indices are no more effective than body mass for estimating fat stores in insectivorous bats. *Journal of Mammalogy*, 99:1065-1071 doi:10.1093/jmammal/gyy103 (10% of effort Boyle lab; 100% of effort KSU)
- 29. *Herse, M.R, K.A. With, and **W.A. Boyle**, 2018. The importance of core habitat for a threatened species in changing landscapes. *Journal of Applied Ecology*, 55:2241-2252; doi: 10.1111/1365-2664.13234 (90% Boyle lab, 100% of effort KSU)
- 28. Hsiung, A., **W.A. Boyle**, R.J. Cooper, and R.B. Chandler, 2018. Altitudinal migration: ecological drivers, knowledge gaps, and conservation implications. *Biological Reviews*, 93:2049-2070. doi:10.1111/brv.12435 (25% of effort Boyle lab; 100% of effort KSU)

27. *Williams, E.J., and **W.A. Boyle**, 2018. Patterns and correlates of within-season breeding dispersal: a common strategy in a declining grassland songbird. *The Auk: Ornithological Advances*, 135:1-14; doi:10.1642/AUK-17-69.1 (100% of contribution Boyle lab; 100% KSU)

- 26. §Sommers, A.S., **Boyle, W.A.**, and L.P. McGuire, 2017. Validation of a field-ready handheld meter for plasma β-hydroxybutyrate analysis, *J. Field Ornithology* **88**:399-404; doi:10.1111/jofo.12233. (70% contribution Boyle lab, 100% effort KSU)
- 25. *Herse, M.R., M.E. Estey, P.J. Moore, B.K. Sandercock, and **W.A. Boyle**, 2017. Landscape context determines settlement patterns of an enigmatic grassland songbird. *Landscape Ecology*. doi:10.1007/s10980-017-0574-z (85% contribution Boyle lab, 100% of effort KSU)
- 24. **Boyle, W.A.** Altitudinal bird migration in North America, 2017. *The Auk: Ornithological Advances* **134**:443-465. doi:10.1642/AUK-16-228.1 (100% of contribution and effort KSU)
- 23. **Boyle, W.A.**, B.K. Sandercock, and K. Martin, 2016. Patterns and drivers of intraspecific variation in avian life history along elevational gradients: a meta-analysis. *Biological Reviews* **91**:469-482; doi:10.1111/brv.12180 (75% contribution Boyle lab; 50% effort KSU)
- 22. Visco, D.M., N.L. Michel, **W.A. Boyle**, B.J. Sigel, S. Woltmann, and T.W. Sherry, 2015. Patterns and causes of understory bird declines in human-disturbed tropical forest landscapes: a case study from Central America. *Biological Conservation* **191**:117-129. doi:10.1016/j.biocon.2015.05.018 (25% contribution Boyle lab, 100% effort KSU)
- 21. **Boyle, W.A.** and K. Martin, 2015. The conservation value of high elevation habitats to migrant birds in southern British Columbia. *Biological Conservation* **192**:461-476. doi:10.1016/j.biocon.2015.10.008 (60% contribution Boyle lab; 70% of effort KSU)
- 20. Ross, J.D, J.F. Kelly, E.S. Bridge, M.H. Engle, D.L. Reinking, and **W.A. Boyle**, 2015. Pallid bands in feathers and associated stable isotope signatures reveal effects of severe weather stressors on fledgling sparrows. *PeerJ* 3:e814. doi:10.7717/peerj.814 (20% contribution Boyle lab, 100% of effort KSU)
- 19. **Boyle, W.A.** and B. Sigel, 2015. Ongoing changes in the avifauna of La Selva Biological Station: twenty-three years of Christmas Bird Counts. INVITED SPECIAL ISSUE: TROPICAL UNDERSTORY INSECTIVORES, *Biological Conservation* **188**:11-21; doi:10.1016/j.biocon.2015.01.004 (90% contribution Boyle lab, 100% of effort KSU)
- 18. **Boyle, W.A.** and E. Waterman, 2015. The ecology of musical performance: toward a robust methodology. INVITED EDITED BOOK CHAPTER, *Current Directions in Ecomusicolgy*, A. S. Allen, editor, Routledge Publishers. (Cross-disciplinary study evaluating the applicability of standard methodological tools from behavioral ecology to the study of human musical communication; 50% contribution Boyle lab, 100% effort KSU). Book awarded the <u>Ellen Koskoff Edited Volume Prize</u> from the Society for Ethnomusicology
- 17. *Jones, M.A., E.H. DuVal and **W.A. Boyle**, 2014. Individual and temporal variability in the courtship behavior of White-ruffed Manakins (*Corapipo altera*), a species with facultative cooperative displays. *The Auk: Ornithological Advances* **131**:727-742. doi: 10.1642/auk-14-96.1 (50% contribution Boyle lab, data collected prior to KSU, 80% of writing KSU)
- 16. McGuire, L., and Boyle, W.A., 2013. Altitudinal migration of bats: evidence, patterns, and

- processes. *Biological Reviews* **88**:767-786. doi:10.1111/brv.12024 (50% contribution Boyle lab, data collected prior to KSU, 10% of writing KSU)
- 15. **Boyle, W.A.**, D.W. Winkler, and C.G. Guglielmo, 2012. Rapid loss of fat but not lean mass prior to chick provisioning supports the flight efficiency hypothesis in Tree Swallows. *Functional Ecology* **26**:895-903.
- 14. **Boyle, W.A.** and J.L. Bronstein, 2012. Phenology of tropical understory trees: patterns and correlates. *Revista de Biología Tropical* **60**:1415-1430
- 13. **Boyle, W.A.**, 2011. Short-distance partial migration of Neotropical birds: a community-level test of the foraging limitation hypothesis. *Oikos*, **120**:1803-1816. (INVITED SUBMISSION, SPECIAL ISSUE ON ECOLOGY AND EVOLUTION OF PARTIAL MIGRATION)
- 12. **Boyle, W.A.**, C.G. Guglielmo, K.A. Hobson, and D.R. Norris, 2011. Lekking birds in a tropical forest forego sex for migration. *Biology Letters* **7**:661-663
- 11. **Boyle, W.A.**, C.J. Conway, J.L. Bronstein, 2011. Why do some, but not all, birds migrate? A comparative study of diet breadth and fruit preference. *Evolutionary Ecology* **25**:219-236. (WINNING OTS STUDENT PAPER AWARD)
- 10. **Boyle, W.A.**, D.R. Norris, and C.G. Guglielmo, 2010. Storms drive altitudinal migration in a tropical bird. *Proceedings of the Royal Society-B* **277**:2511-2519
- 9. Sol, D., N. Garcia, A. Iwaniuk, K. Davis, A. Meade, **W.A. Boyle**, and T. Székely, 2010. Evolutionary divergence in brain size between migratory and resident birds. *PLoS One* 5:e9617
- 8. **Boyle, W.A.**, 2010. Does food abundance explain altitudinal migration in a tropical frugivorous bird? *Canadian Journal of Zoology* **88**:204-213
- 7. §Lumpkin, H. and **W.A. Boyle**, 2009. Effects of forest age on fruit composition and removal in tropical bird-dispersed understorey trees. *Journal of Tropical Ecology* **25**:515-522
- 6. **Boyle, W.A.**, 2009. How to keep tropical montane frugivorous birds in captivity. *Ornitología Neotropical*, **20**:265-273
- 5. **Boyle, W.A.**, 2008. Partial migration in birds: an evaluation of three hypotheses in a tropical lekking frugivore. *Journal of Animal Ecology*, 77:1122-1128
- 4. **Boyle, W.A.**, 2008. Can variation in risk of nest predation explain altitudinal migration in tropical birds? *Oecologia* **154**:397-403
- 3. **Boyle, W.A.**, §C.N. Ganong, D.B. Clark, and §M.A. Hast, 2008. Density, distribution, and attributes of tree cavities in an old-growth tropical rain forest. *Biotropica* **40**(2):241-245
- 2. **Boyle, W.A.** and C.J. Conway, 2007. Why migrate? A test of the evolutionary precursor hypothesis. *American Naturalist* **169**, 344-359
- 1. Holland, J.N., J.H. Ness, **W.A. Boyle**, and J.L. Bronstein, 2005. Mutualisms as consumer-resource interactions. Pages 17-33 *in* P. Barbosa and I. Castellanos, editors. Ecology of Predator-Prey Interactions, Oxford University Press, Oxford, England

DATA PRODUCTS AND OTHER PUBLICATIONS:

14. *Smith, E.B.., §A.J. Roe, *K.M. Silber, *E.J. Williams, *S.K. Winnicki, and **W.A. Boyle**, Data and code supplementing article: Consequences of drought for grassland songbird reproduction. doi.org/10.5281/zenodo.5224970 ((100% of contribution Boyle lab; 100% KSU)

13. *Winnicki, S.K.; **W.A. Boyle**, *E.J. Williams, §S.M. Munguía, 2020. <u>Data and code deposited to Dryad</u> supplementing the article: Social interactions do not drive territory aggregation in a grassland songbird. doi.org/10.5061/dryad.3xsj3tx9w (100% of contribution Boyle lab; 100% KSU)

- 12. *Williams, E.J., and **W.A. Boyle**, 2019. Data and code supporting the article: Causes and consequences of avian dispersal decisions in a dynamic grassland environment. doi:10.5061/dryad.c0n5hm8 (100% of contribution Boyle lab; 100% KSU)
- 11. *Herse, M.R., K.A. With, and **W.A. Boyle**, 2018. <u>Data and code deposited to Dryad</u> supplementing the article: The importance of core habitat for a threatened species in changing landscapes. doi: 10.5061/dryad.9pr1476 (100% of contribution Boyle lab; 100% KSU)
- 10. *Herse, M.R., M.E. Estey, P.J. Moore, B.K. Sandercock, and **W.A. Boyle**, 2017. Data supplementing the article: Landscape context drives breeding habitat selection by an enigmatic grassland songbird. doi:10.5281/zenodo.823708 (100% contribution Boyle lab, 100% KSU)
- Boyle, W.A., B.K. Sandercock, and K. Martin. 2015. Data from: Patterns and drivers of intraspecific variation in avian life history along elevational gradients: a meta-analysis. Dryad Digital Repository. doi:10.5061/dryad.h13vg (100% contribution Boyle lab, 100% KSU)
- 8. **Boyle, W.A.** and K. Martin 2015. Data from: The conservation value of high elevation habitats to North American migrant birds. Dryad Digital Repository. doi: 10.5061/dryad.bf486 (100% contribution, 100% KSU)
- 7. **Boyle, W.A.** and B. Sigel. 2015. Data deposited to Dryad from: Ongoing changes in the avifauna of La Selva Biological Station: twenty-three years of Christmas Bird Counts. doi:10.1016/j.biocon.2015.01.004 (100% contribution, 100% KSU)
- 6. **Boyle, W.A. 2014.** Multi-media data: video behavioral vouchers of *Corapipo altera* displays, Cornell Lab of Ornithology's Macaulay Library, catalog #s 473506-473519. Audio behavioral vouchers of *Corapipo altera* vocalizations (with M.A. Jones). Macaulay Library, catalog #s 190863-190867 (recordings made prior to KSU, metadata, editing, and archiving 100% KSU)
- 5. Altshuler, D.L., K.L. Cockle, and **W.A. Boyle,** 2013. North American ornithology in transition. Meeting Report of the 5th North American Ornithological Conference (NAOC-V). *Biology Letters*, **9**(1):20120876 (contributed 30% of article, 15% effort KSU)
- 4. **Boyle, W.A.** 2013. Book review; *Cotingas and Manakins* 2012, G. Kirwan and G. Green. *Ibis*, **155**:440-441 (100% KSU)
- 3. **Boyle, W.A.** 2006. Why do birds migrate? The role of food, habitat, predation, and competition. Ph.D. University of Arizona, Tucson, AZ
- Boyle, W.A., 2003. Seed images from the Atlantic Slope of Costa Rica http://aliceboyle.net/Seeds/SeedPhotos.html. Public-access resource used by wide range of scientists (e.g., forensic veterinary scientists, researchers studying dispersal in fragmented tropical landscapes)
- 1. **Boyle, W.A.**, and C.J. Conway, 2003. Avian diversity at the Madrona Pools. Pages 61-72 *in* Madrona Pools Pulse Study: A rapid environmental assessment at the Madrona Pools, Saguaro National Park". U.S. Dept. of Interior, National Park Service, Tucson, AZ

FUNDING

EXTERNAL RESEARCH GRANTS:

Johnson, L. (PI), 3 other co-PIs and W.A. Boyle (co-PI), "Graduate training for the 21st Century: Integrating ecology and evolution through genomics and data science", GAANN (\$456,570)	submitted Mar 2021 (pending)
Boyle, W.A. ; NSF "ROA Supplement proposal for award 1754491: What are the environmental causes of population variability of highly mobile animals?" (\$67,258)	2020–2021
Boyle, W.A. and T. Hefley; NSF "What are the environmental causes of population variability of highly mobile animals?" (\$542,060)	2019–2022
Boyle, W.A. ; NSF "EAGER: Climatic drivers of demography and reproductive behavior of tropical birds" (\$200,000)	2016–2018
Johnson, L. (PI), 2 other co-PIs and W.A. Boyle (co-PI), "Integrative Graduate Training for New Frontiers in Ecology, Evolution, and Genomics", GAANN (\$256,327)	2016–2019
Boyle, W.A. ; NSF EPSCoR First Award "Consequences of climate variability for prairie birds." (\$77,712)	2016
Loiselle, B.A., Balakrishnan, C.N., W.A. Boyle, M. Braun, and E.H. DuVal; NSF-DEB Research Coordination Network (RCN) grant "Enabling comparative studies of the process and products of sexual selection in a genomic context" (\$499,901 total; \$31,136 to KSU)	2015–2020
Boyle, W.A. ; US Fish and Wildlife Service, "Development of spatially-explicit models and decision support tools for Henslow's Sparrows and other priority birds in the Flint Hills" (\$129K)	2015–2017
Academic Keys Future Faculty Grant (\$1000)	2012
National Geographic Society's Committee for Research and Exploration Grant (PI; \$18,500)	2008–2009
NSF-Doctoral Dissertation Improvement Grant (\$12,000)	2004–2005
The Explorers Club Research Grant (\$1,200)	2001
Tinker Foundation/Latin American Studies Research Grant (\$650)	2001
Internal Grants:	
Boyle, W.A.; K-State BRIEF program conference travel support (\$1400)	2019
Boyle, W.A.; K-State BRIEF program conference travel support (\$2000)	2017
Boyle, W.A. : Kansas State ADVANCE distinguished lecture series awardee (\$1400)	2017
Boyle, W.A. ; Dispersal and Migratory Connectivity of a Declining Grassland Songbird", Kansas State University USRG fund (\$5331)	2015–2016
Boyle, W.A. ; Kansas State ADVANCE distinguished lecture series award (\$1200)	2014
Boyle, W.A. ; Kansas State ADVANCE distinguished lecture series awardee (\$1200)	2014

CURRICULUM VITAE ALICE BOYLE

Boyle, W.A.; Kansas State Mentoring Fellowship Award (\$6,000)	2013
Boyle, W.A.; K-State BRIEF program conference travel support (\$1800)	2013
Boyle, W.A.; K-State International Incentives Grant (\$1530)	2013
Silliman Memorial Research Award (five separate awards totaling \$5,850)	2001-2005
Department of Ecology and Evolutionary Biology Research Award (six separate awards totaling \$4,650)	2001–2006
Center for Insect Science Research Award (\$2,000)	2004
American Ornithologists' Union Alexander Wetmore Memorial Research Award (\$1,800)	2002
University of Arizona Research Training Grant Research Grant (\$1000)	2001
FELLOWSHIPS AND OTHER AWARDS:	
NEScent Catalysis Meeting "Genome-enabled Research on Manakins", (co-PI; ~\$30,000 for 25 participants)	2013
NSERC Post-doctoral Fellowship (two years; \$80,000)	2009–2011
Helen Battle Postdoctoral Fellowship, University of Western Ontario (two years; \$70,000)	2007–2009
Organization for Tropical Studies–REU Program Mentor Fellowship (two summers; \$1600)	2005 & 2007
American Ornithologists' Union Tucker Award (conference travel; \$250)	2005
Women in Science and Engineering (conference travel; \$600)	2006
Department of Ecology and Evolutionary Biology (scholarships and waivers over six years; \$79,575)	2000–2006
NSERC Post Graduate Fellowship (two years; \$38,200)	2002-2003
University of Arizona Research Training Grant Graduate Fellowship (one year; \$12,105)	2001–2002
University of Arizona Graduate College Fellowship (one year; \$23,100)	2000-2001
Maurice Taylor Scholarship in Music, Hawk Eilertson Scholarship in Music, John S. Chappell Memorial Scholarship in Music, British Columbia Government Challenge Grant	1987–1989

<u>SEMINARS AND PRESENTATIONS</u> (underlining denotes presenter, bold font denotes Boyle lab member, *denotes graduate student, §denotes undergraduate student, †denotes other students that I mentored)

EXTERNAL RESEARCH SEMINARS:

upcoming: <u>Boyle, W.A.</u> , "Rain, movement, and changing perspectives on tropical and grassland birds," Department of Biology, University of Wisconsin,	29 Oct 2021
Boyle, W.A. SUTTON LECTURER, Biology Department and Sam Noble museum, University of Oklahoma, Norman, OK (research seminar & evening public lecture)	TBD (COVID-delay)
Boyle, W.A. "Dancing in the rain: how precipitation can shape the evolutionary ecology of tropical birds", Department of Biology,	23 Sep 2020 (online)

University of Missouri St. Louis, St. Louis, MO Boyle, W.A. "More than meets the eye: high-speed video reveals aerobatic 21 Sep 2020 display and the mechanisms of sound production in Corapipo altera", (online) Department of Ecology and Evolutionary Biology, Texas A & M University, College Station, TX Boyle, W.A. "Dancing in the rain: how precipitation can shape the 16 Jan 2020 evolutionary ecology of tropical birds", GRADUATE-STUDENT INVITED COLLOQUIUM SPEAKER, Department of Biological Science, Florida State University, Tallahassee, FL Boyle, W.A. "Grassland birds and rural landowners: lessons learned from 17 Jan 2020 engaging through music", Ecology and Evolution series, Department of Biological Science, Florida State University, Tallahassee, FL **Boyle, W.A.** "From dance moves to dispersal: rainfall and the ecology of 12 Nov 2019 tropical and grassland birds." Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ *Shogren, E.H. and W.A. Boyle "Population genetics and genomics of 4 Oct 2019 Corapipo altera, the White-ruffed Manakin" Manakin Genomics Research Coordination Network meeting, Paraná, Brazil **Boyle, W.A.** "From dance moves to dispersal: rainfall and the ecology of 26 Feb 2019 tropical & grassland birds." GRADUATE-STUDENT INVITED SEMINAR SPEAKER, Odum School of Ecology, University of Georgia Boyle, W.A. "Population biology of tallgrass prairie bird birds: 18 Jan 2019 from dispersal to drought." GRADUATE-STUDENT INVITED SEMINAR SPEAKER, Department of Natural Resources and Environmental Sciences. University of Illinois Urbana-Champaign, Urbana, IL *Shogren, E.H. and W.A. Boyle. "Investigación de Corapipo altera en 20 Jun 2018 Parque Nacional Volcán Tenorio." Sistema Nacional de Áreas de Conservación, El Pilón, Costa Rica *Shogren, E.H. and W.A. Boyle. "Dancing in the rain: selective drivers of 9 Nov 2017 variability in a Neotropical manakin." Benedictine College Biology Colloquium, Atchison, KS *Shogren, E.H. and W.A. Boyle. "Investigación de Corapipo altera en 16 Jun 2017 Parque Nacional Volcán Tenorio." Sistema Nacional de Áreas de Conservación, El Pilón, Costa Rica *Herse, M.R., M.E. Estey, P.J. Moore, B.K. Sandercock, and W.A. Boyle. 29 Mar 2017 "Patterns and drivers of habitat selection by Henslow's Sparrows: a landscape perspective." Landscape Conservation Cooperative Network Webinar Series, recorded live, available: https://www.youtube.com/watch?v= QJTbdrO6IM&t=53s **Boyle, W.A.** "Consequences of rain for rainforest birds" Department of 27 Feb 2017 Wildlife Ecology and Conservation, University of Florida, Gainesville, FL Boyle, W.A. "Causes and consequences of animal movement: case studies of 6 Feb 2017 tropical forest and temperate grassland birds" Wichita State University,

Wichita, KS Boyle, W.A. "Consequences of rain for rainforest birds" Texas Tech 26 Oct 2016 University, Lubbock, TX **Boyle, W.A.** "Consequences of rain for rainforest birds" Department of 24 Feb 2016 Biology, University of Nebraska Omaha, Omaha, NE Boyle, W.A. "Consequences of rain for rainforest birds" Department of 19 Nov 2015 Biological Sciences, Auburn University, Auburn, AL **Boyle, W.A.** "Evolución de la migración: sistemas migratorios latitudinales y 6 Oct 2015 altitudinales en regiones tropicales y templadas" WORKSHOP: Técnicas de Investigación en Ecología de Aves, Universidad Austral de Chile, Valdivia, Chile **Boyle, W.A.** "Patterns and causes of grassland bird dispersal movements 16 Jun 2015 over multiple spatial and temporal scales" Washington College, Chestertown, CT Boyle, W.A. "Causes and consequences of animal movement: case studies of 25 Mar 2015 tropical forest birds and temperate grassland birds" Department of Biology, Emporia State University, Emporia, KS Boyle, W.A. "Causes and consequences of animal movement: case studies of 18 Mar 2014 tropical forest birds and temperate grassland birds" Organismal Biology and Ecology, University of Montana, Missoula, MT Boyle, W.A. "Consequences of rain for rainforest birds" Department of 11 Apr 2014 Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT **Boyle, W.A.** "Consequences of rain for rainforest birds" Program in Ecology, 26 Feb 2014 Evolution, and Conservation Biology, University of Illinois, Champaign, Boyle, W.A. "Consequences of rain for rainforest birds: migration, life 6 Dec 2013 history, and conservation" Biology Department, University of New Mexico. Albuquerque, NM **Boyle, W.A.** "Altitudinal migration mediates life history trade-offs in 3 Sep 2013 tropical birds" Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS **Boyle, W.A.** "Altitudinal migration mediates life history trade-offs in 1 Feb 2013 tropical birds" Department of Ecology and Evolutionary Biology, Tulane University, New Orleans, LA **Boyle, W.A.** "Altitudinal migration mediates life history trade-offs in 30 Nov 2012 tropical birds" Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS Canadian Wildlife Service, Delta, BC 21 Feb 2012 Department of Biology, Kansas State University, Manhattan, KS 13 Feb 2012 Department of Biological Sciences, Simon Fraser University, Vancouver, BC 2 Feb 2012 Department of Forest Sci., University of British Columbia, Vancouver, BC 18 Jan 2012 Department of Biology, East Carolina University, Greenville, NC 30 Nov 2011 Biodiversity Research Centre, University of British Columbia, Vancouver, 21 Nov 2011

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Be	
Department of Zoology and Physiology, University of Wyoming, Laramie, WY	13 Oct 2011
Department of Biological Sciences, Old Dominion University, Norfolk, VA	21 Mar 2011
Department of Biology, Texas State University, San Marcos, TX	17 Feb 2011
Department of Biology, University of St. Thomas, St. Paul, MN	2 Dec 2010
School of Natural Resources and the Environment, University of Arizona, Tucson, AZ	19 Nov 2010
Department of Biological Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA (GRADUATE STUDENT NOMINATED SPEAKER)	21 Oct 2010
Cornell University, Lab of Ornithology, Ithaca, NY	5 Oct 2010
Cornell University, Department of EEB, Ithaca, NY	6 Oct 2010
Department of Biology, Carleton University, Ottawa, ON	29 Jan 2010
Department of Biology, University of Western Ontario, London, ON	2010 & 2008
La Selva Biological Station, Costa Rica	2008, 2007
Spanish-language presentation to Costa Rican National Parks personnel, conservationists, and land managers. San José, Costa Rica	15 Nov 2004
Center for Latin American Studies, University of Arizona, Tucson, AZ	10 Nov 2001
INTERNAL RESEARCH SEMINARS:	
§Nguyen, L., W.A. Boyle, *E.H. Shogren, §N. Bergevine, and L.B. Day "Novel Understanding of avian biomechanics and sonations using high-speed video of the White-ruffed Manakin (<i>Corapipo altera altera</i>)." Neuroscience Research Showcase, University of Mississippi, Oxford MS (online presentation)	13 Apr 2020
*Smith, D.J., §A.J. Roe, *S.K. Winnicki, *E.J. Williams, A.G. Hope, and W.A. Boyle. "Consequences of severe drought on grassland songbird reproduction." Konza Prairie LTER meeting (poster)	31 May 2019
Boyle, W.A. "From dispersal to dance moves: rainfall and the ecology of grassland & tropical birds." Division of Biology, Kansas State University. Manhattan, KS	31 Aug 2018
*Winnicki, S.K. and W.A. Boyle. "Effects of brood parasitism on nestling growth and development." ONE OF FOUR GRADUATE STUDENTS FROM THE DIVISION OF BIOLOGY INVITED TO PRESENT during the 50 th Anniversary of the founding of the Division of Biology at Kansas State University. Manhattan, KS	Apr 2018
*Winnicki, S.K. "Effects of brood parasitism on nestling growth and development." Kansas State University Three-Minute Thesis Competition, Manhattan, KS.	13 Feb 2018
Boyle, W.A. "Avian research at Konza: long-term data and recent initiatives." Presentation to the LTER site review committee and LTER participants, Konza Prairie Biological Station, KS	7 Sep 2017

*Herse, M.R. and W.A. Boyle. "Core versus total habitat area for a declining grassland songbird: bigger is not always better" Division of Biology Graduate Student BioForum, Kansas State University, Manhattan, KS	4 Mar 2017
*Herse, M.R. and W.A. Boyle. "Relative effects of habitat amount and fragmentation on occupancy dynamics of a rare and highly mobile grassland bird" Division of Biology Graduate Student BioForum, Kansas State University, Manhattan, KS	5 Mar 2016
*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: what explains variation in within-season breeding dispersal in a declining grassland songbird?" Division of Biology Graduate Student BioForum, Kansas State University, Manhattan, KS (BEST STUDENT PRESENTATION AWARD)	7 Mar 2015
*Williams E.J. and W.A. Boyle. "Does food abundance affect within- season breeding dispersal of male Grasshopper Sparrows?" Division of Biology Graduate Student BioForum, Kansas State University, Manhattan, KS	1 Mar 2014
Boyle, W.A. "Ongoing change in the avifauna of La Selva Biological Station" Division of Biology EEB seminars, Kansas State University, Manhattan, KS	12 Sep 2013
Invited Oral Conference Presentations W.A. Boyle. "Why didn't I think of this before? Rain, movement, and changing perspectives on tropical and grassland birds". PLENARY SPEAKER, Joint meeting of the American Ornithological Society and the Society of Canadian Ornithologists/Société des ornitholgistes du Canada (SCO-SOC; virtual).	11 Aug 2021
*Shogren, E.H. and W.A. Boyle. "Dancing in the rain: environmental drivers of behavioral and social variability in White-ruffed Manakin courtship displays." Society for Integrative and Comparative Biology (virtual)	7 Jan 2021
Boyle, W.A. , D. Bodony, E. Shogren, L. Nguyen, and E. Day. "More than meets the eye: high-speed video reveals aerobatic display and the mechanisms of sound production in <i>Corapipo altera</i> ". North American Ornithological Congress (virtual)	13 Aug 2020
*Shogren, E.H. and W.A. Boyle. "Detecting genomic signatures of natural selection in a sexually selected species." North American Ornithological Congress (virtual) HONORABLE MENTION, OUTSTANDING STUDENT PRESENTATION AWARDS	13 Aug 2020
<u>DuVal, E.</u> , W.A. Boyle , * E.H. Shogren , and 35 other authors. "Does variation in "sexually selected" traits reflect current opportunity for sexual selection across species?" North American Ornithological Congress (virtual)	13 Aug 2020
Balakrishnan, C., W.A. Boyle, *E.H. Shogren, and 35 other authors. "Comparative genomics of a sexually selected avian family." North American Ornithological Congress (virtual)	13 Aug 2020

Boyle, W.A. , "Grasslands Roadmap 2020: a perspective on research". 2020 Central Grasslands Roadmap Summit (virtual;	4 Aug 2020
www.grasslandsroadmap.org/). View presentation: https://www.youtube.com/watch?v=pqyVJ1ZnDR4	
Martin, K., T. Altamirano, *D. de Zwaan, *T. Ibarra, and W.A. Boyle. "The conservation value of mountain habitats for birds in the Americas and predicted impacts of climate change". International Ornithological Congress, Vancouver, Canada	25 Aug 2018
Boyle, W.A. , "Movement ecology of grassland sparrows and why it matters for conservation". American Ornithological Society, Tucson, AZ	12 Apr 2018
Boyle, W.A., "Why rain matters: how weather affects the ecology and conservation of tropical birds". PLENARY SPEAKER, 21st Congress of the Mesoamerican Society of Biology and Conservation (SMBC) and 6th International Meeting of Partners in Flight (PIF), San José, Costa Rica	1 Nov 2017
Boyle, W.A. "Dancing in the rain: how eating fruit and the weather affect life, death, and sex for tropical manakins". KEYNOTE SPEAKER, Kansas Ornithological Society, Junction City, KS	7 Oct 2017
Boyle, W.A. "Evaluating hypotheses for animal movement strategies". Gordon Research Conference on Movement Ecology of Animals. Ventura, CA	22 Mar 2017
Boyle, W.A. "The current and future of tropical frugivores in a changing climate: insights and challenges". North American Ornithological Conference, Washington, DC	20 Aug 2016
Boyle, W.A. and B.K. Sandercock. "Climatic drivers of tropical avian demography in very wet environments: a case history from Central American White-ruffed Manakins (<i>Corapipo altera</i>)". North American Ornithological Conference, Washington, DC	18 Aug 2016
Boyle, W.A. "Corapipo manakins". Second meeting of the Manakin Genomics RCN, Annapolis, MD	14 Aug 2016
* <u>Aulicky, C.</u> and W.A. Boyle " <i>Lepidothrix</i> manakins". Second meeting of the Manakin Genomics RCN, Annapolis, MD	14 Aug 2016
Boyle, W.A., M. Estey, and *M.R. Herse. "Development of spatially explicit models and decision support tools for Henslow's Sparrows and other priority birds in the Flint Hills". Eastern Tallgrass and Big Rivers Landscape Conservation Cooperative meeting, Manhattan, KS	15 July 2015
<u>Boyle, W.A.</u> "Altitudinal migration in the Americas". American Ornithologists' Union / Cooper Ornithological Society, Estes Park, CO	24 Sep 2014
Boyle, W.A. , B.K. Sandercock, and K. Martin. "Vertebrate life history variation along elevational gradients: a global meta-analysis". The Wildlife Society meeting, Portland, OR	16 Oct 2012
CAnMove Ecology and Evolution of Partial Migration in Animals symposium, Lund University, Sweden	31 Aug 2010
American Ornithologists' Union, Philadelphia, PA	15 Aug 2009

NCCR International Conference on Plant Species Concepts and Evolution, 1 Feb 2008 University of Neuchâtel, Switzerland CONTRIBUTED CONFERENCE PRESENTATIONS *Smith, D.J., *K.M. Silber, *E.J. Williams, *S.K. Winnicki, P.E. Klug, 13 Aug 2021 K.L. Kosciuch, W.E. Jensen, J.W. Rivers, B.F. Sousa, B.K. Sandercock, and W.A. Bovle, "Local grassland bird declines were not explained by long-term changes in reproductive output." Joint meeting of the American Ornithological Society and the Society of Canadian Ornithologists (virual; oral) *Silber, K.M., T.J. Hefley, W.A. Boyle, "An integrated resource selection 10 Aug 2021 model to predict avian habitat use from grassland vegetation structure." Joint meeting of the American Ornithological Society and the Society of Canadian Ornithologists (virual; oral) *Shogren, E.H. and W.A. Boyle. "Spread the word: male manakins 4 Aug 2021 advertise the presence of display sites with neighboring competitors" Animal Behavior Society (virtual; oral) *Mohankumar, M, W.A. Boyle, and T. Hefley, "Data fusion of distance Aug 2021 sampling and spatial capture-recapture data". Joint Statistical Meetings Panjabi, A., T. Vertcauten, W.A. Boyle ... [and 24 other coauthors]. 17 May 2021 "Central Grasslands Roadmap". Trilateral Committee for Wildlife and Ecoystem Conservation and Management 2021 meeting (virtual) Boyle, W.A., D. Bodony, E.H. Shogren, L. Nguyen, and E. Day. "More 2 Jan 2021 than meets the eye: high-speed video reveals aerobatic display and the mechanisms of sound production in Corapipo altera". Society for Integrative and Comparative Biology (virtual) *Smith, D.J., T.J. Hefley, and W.A. Boyle. "Climatic variability explains 12 Aug 2020 interannual variation in breeding distributions of Grasshopper Sparrows." North American Ornithological Congress (virtual; poster) *Mohankumar, N., W.A. Boyle, and T.J. Hefley. "An integrated population 11 Aug 2020 model for spatial capture-recapture and distance sampling data" North American Ornithological Congress (virtual; oral) *Driver, R. W.A. Boyle, M. Fuxjager, B. Schlinger W. Warren, T. B. July 2020 Ryder, B. Jones, B. Loiselle, M. Braun, R. Dikow, P. Frandsen, A. Zimin, C. Balakrishnan. "Olfactory gene evolution during the evolution of frugivory in manakins." Society for Molecular Biology and Evolution, Quebec City, Canada (oral) §Nguyen, L. W.A. Boyle, E.B. Day. "Novel understanding of avian Apr 2020 biomechanics and sonations using high-speed video of White-ruffed Manakins (Corapipo altera)." Mississippi Academy of Sciences, Biloxi, MS (poster) *Silber, K., *N.M. Mohankumar, T.J. Hefley, W.A. Boyle. "How does 31 Jan 2020 precipitation influence apparent survival in Grasshopper Sparrows?" Kansas Natural Resources conference, Manhattan, KS (poster)

*Kraus, H. M., W.E. Jensen, M.L. Jameson, W.A. Boyle , G.R. Houseman, and M.M. Reichenborn. "Nestling condition of a grassland bird not associated with food availability in restored grasslands of the Great Plains." Ecological Society of America, Louisville, KY (oral)	Aug 2019
Hefley, T.J., W.A. Boyle, *M. Narmadha. "Accounting for location uncertainty in model-based distance sampling methods." Joint Statistical Meetings, Denver, CO (oral)	Jul 2019
*Shogren, E.H. and W.A. Boyle. "Dancing drives evolution of sexual size dimorphism in manakins". Behavior, Chicago, IS (oral)	Jul 2019
*Winnicki, S.K. and W.A. Boyle. "Direct effects of Brown-headed Cowbird (<i>Molothrus ater</i>) brood parasitism on the growth and development of grassland songbirds." American Ornithological Society, Anchorage, AK (oral)	Jun 2019
*Smith, D. J., §A.J. Roe, *S.K. Winnicki, *E.J. Williams, A. G. Hope, and W.A.Boyle. "Consequences of severe drought on grassland songbird reproduction" American Ornithological Society, Anchorage, AK (poster)	Jun 2019
*Shogren, E.H. and W.A. Boyle. "Dancing drives evolution of sexual size dimorphism in manakins". Evolution, Providence, RI (oral)	Jun 2019
*Winnicki, S.K. and W.A. Boyle. "Indirect effects of Brown-headed Cowbird (<i>Molothrus ater</i>) brood parasitism on the growth and development of grassland songbirds." Southwestern Association of Naturalists, Chihuahua, Mexico (oral)	Apr 2019
*Winnicki, S.K. and <u>W.A. Boyle</u> . "Direct effects of Brown-headed Cowbird (<i>Molothrus ater</i>) brood parasitism on the growth and development of grassland songbirds" Kansas Natural Resources Conference, Manhattan, KS. (oral)	31 Jan 2019
§Smith, D.J. and W.A. Boyle. "Effects of drought on grassland songbirds: reproductive responses and trophic drivers." Kansas Natural Resources Conference, Manhattan, KS. (oral)	31 Jan 2019
*Winnicki, S.K. and W.A. Boyle. "Direct effects of Brown-headed Cowbird (<i>Molothrus ater</i>) brood parasitism on the growth and development of grassland songbirds." Kansas Ornithological Society, Lawrence, KS. (oral) BEST MASTERS STUDENT PRESENTATION AWARD	6 Oct 2018
§Smith, D.J. and W.A. Boyle. "Patterns and trophic drivers of reproductive responses to drought in grassland songbirds." Kansas Ornithological Society, Lawrence, KS. (oral)	6 Oct 2018
*Winnicki, S.K. and W.A. Boyle. "Direct and indirect effects of Brownheaded Cowbird (<i>Molothrus ater</i>) brood parasitism on growth and development of grassland songbirds." International Ornithological Congress, Vancouver, Canada. (poster)	22 Aug 2018
*Shogren, E.H. and W.A. Boyle. "Natural or sexual selection? Sexual size dimorphism in manakins." International Ornithological Congress, Vancouver, Canada (oral)	21 Aug 2018

*Winnicki, S.K. and W.A. Boyle. "The effects of Brown-headed Cowbird brood parasitism on the growth and development of grassland songbirds." American Ornithological Society, Tucson, AZ (oral)	12 Apr 2018
*Winnicki, S.K. and W.A. Boyle. "The effects of Brown-headed Cowbird brood parasitism on the growth and development of grassland songbirds." Kansas Natural Resources Conference, Manhattan, KS (oral)	9 Feb 2018
*Winnicki, S.K., §E.T. Harris, §B. Rosado-Ramos, §D.C. Savage, and W.A. Boyle. "The role of brood parasitism in shaping nestling growth and development strategies: preliminary results." Annual Meeting of the Kansas Ornithological Society, Junction City, KS (oral)	7 Oct 2017
Boyle, W.A. "Isotopic evidence of long-distance breeding dispersal in a migratory grassland bird" Ecological Society of America, Portland, OR (oral)	10 Aug 2017
*Shogren, E.H. and W.A. Boyle. "How does precipitation affect survival across Neotropical bird communities?" American Ornithological Society, East Lansing, MI (poster)	3 Aug 2017
*Winnicki, S.K. and W.A. Boyle. "Complex drivers of Grasshopper Sparrow (<i>Ammodramus savannarum</i>) nest success" American Ornithological Society, East Lansing, MI (poster)	3 Aug 2017
*Herse, M.R., K.A. With and W.A. Boyle. "Core versus total habitat area for a declining grassland songbird: bigger is not always better (oral). Meeting of the U.SInternational Association of Landscape Ecology, Baltimore, MD. (oral; BEST GRADUATE STUDENT PRESENTATION AWARD)	10 Apr 2017
§Gustafson, M.L. and W.A. Boyle. "Weathering the storm: how grassland birds in Kansas anticipate and respond to weather extremes" Kansas Natural Resources Conference, Wichita, KS (poster)	27 Jan 2017
*Winnicki, S.K. and W.A. Boyle. "Complex drivers of Grasshopper Sparrow (<i>Ammodramus savannarum</i>) nest success." Kansas Natural Resources Conference, Wichita, KS (poster)	26 Jan 2017
*Herse, M.R., M.E. Estey, P.J. Moore, and W.A. Boyle. "Landscape context and local disturbance drive within-season site occupancy dynamics of Henslow's Sparrows in Kansas." Annual Meeting of the Kansas Ornithological Society, Garden City, KS (oral)	1 Oct 2016
§ Winnicki, S.K. and W.A. Boyle. "Causes of Grasshopper Sparrow (Ammodramus savannarum) density variation: parasitism, cooperative care, and extra-pair paternity." Kansas Ornithological Society, Garden City, KS. 1 Oct 2016 (oral; BEST UNDERGRADUATE STUDENT PRESENTATION AWARD)	1 Oct 2016
*Herse, M.R., M. Estey, and W.A. Boyle. "What drives breeding habitat selection behavior in a rare and highly mobile grassland bird? A multiscale landscape perspective". North American Ornithological Conference, Washington, DC (oral)	18 Aug 2016

*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: patterns and causes of within-season breeding dispersal in a declining grassland songbird". North American Ornithological Conference, Washington, DC (oral)	20 Aug 2016
§ Winnicki, S.K., and W.A.Boyle. "Causes of Grasshopper Sparrow (Ammodramus savannarum) density variation: parasitism, cooperative care, and extra-pair paternity", North American Ornithological Conference, Washington, DC (oral)	20 Aug 2016
*Herse, M.R., M. Estey, and W.A. Boyle. "Patterns and predictors of breeding habitat occupancy in declining grassland birds: a multi-scale approach" Kansas Natural Resources Conferences, Wichita, KS (oral; WINNER OF THE KANSAS CHAPTER OF <i>THE WILDLIFE SOCIETY</i> FOR BEST STUDENT PRESENTATION)	5 Feb 2016
Boyle, W.A. "Patterns of breeding dispersal in a declining grassland bird", The Wildlife Society national meeting, Winnipeg, Manitoba, Canada (oral)	19 Oct 2015
*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: what explains variation in within-season dispersal in a declining songbird?", The Wildlife Society national meeting, Winnipeg, Manitoba, Canada (oral)	19 Oct 2015
*Herse, M.R., M. Estey, and W.A. Boyle. "Patterns and predictors of breeding habitat occupancy in a highly mobile grassland bird: a multiscale approach" Kansas Ornithological Society meeting, Emporia, KS (oral; WINNER OF THE CELIA WHITE MARKUM AWARD FOR BEST STUDENT PRESENTATION)	3 Oct 2015
Boyle, W.A. and * E.J. Williams . "Local and regional patterns of breeding dispersal and habitat selection in a declining grassland bird", LTER All Scientists Meeting, Estes Park, CO (poster)	1 Sep 2015
*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: what explains variation in within-season dispersal in a declining songbird?" Central Mountains and Plains Section of The Wildlife Society, Manhattan, KS (oral)	11 Aug 2015
*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: what explains variation in within-season dispersal in a declining songbird?" American Ornithologists' Union / Cooper Society, Norman, OK (oral; WINNER OF AOU'S ROBERT B. BERRY CONSERVATION AWARD FOR OUTSTANDING STUDENT PRESENTATION)	31 Jul 2015
§ Winnicki, S.K. and W.A. Boyle. "Aggregation of Grasshopper Sparrow (Ammodramus savannarum) territories: a test of the extra pair mating and cooperative care hypotheses" American Ornithologists' Union / Cooper Society, Norman OK (oral)	31 Jul 2015
Boyle, W.A. and E.J. Williams. "Local and regional patterns of breeding dispersal and habitat selection in a declining grassland bird", American Ornithologists' Union / Cooper Society, Norman, OK (poster)	29 Jul 2015

Martin, K., M. Martin and W.A. Boyle. "The conservation value of high elevation habitats to migrant birds?" Wilson Ornithological Society, Wolfville, Nova Scotia, Canada (oral)	18 Jul 2015
*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: what explains variation in within-season dispersal in a declining songbird?" Wilson Ornithological Society, Wolfville, Nova Scotia, Canada (oral)	18 Jul 2015
§ Winnicki, S.K. and W.A. Boyle. "Aggregation of Grasshopper Sparrow (Ammodramus savannarum) territories: a test of the extra pair mating and cooperative care hypotheses" Wilson Ornithological Society, Wolfville, Nova Scotia, Canada (oral)	18 Jul 2015
§ Winnicki, S.K. and W.A. Boyle. "Aggregation of Grasshopper Sparrow (Ammodramus savannarum) territories: a test of the extra pair mating and cooperative care hypotheses". Ohio Avian Research Conference, Granville, OH (oral; WINNER OF THE DR. DAVID R. OSBORNE ORNITHOLOGY PRIZE FOR THIS PRESENTATION)	18 Oct 2014
*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: what explains variation in within-season dispersal in a declining songbird?" Kansas Ornithological Society, Salina, KS (oral; BEST UNDERGRAD/MSC STUDENT PRESENTATION AWARD)	4 Oct 2014
Ross, J. D., J. F. Kelly, E. S. Bridge, and W.A. Boyle . "Severe weather, fault bars, and stable isotope signatures of stress". American Ornithologists' Union / Cooper Society, Estes Park, CO (oral)	24 Sep 2014
*Williams E.J. and W.A. Boyle. "Grasshopper Sparrows on the move: what explains variation in within-season dispersal in a declining songbird?" American Ornithologists' Union / Cooper Society, Estes Park, CO (oral)	27 Sep 2014
Boyle, W.A. "Temporally-dynamic patterns of Grasshopper Sparrow breeding densities: implications for inferring habitat quality". Kansas Natural Resources Conference, Wichita, KS (oral)	31 Jan 2014
§Pei, C. K. and W.A. Boyle. "A test of interspecific competition between two common grassland birds". Kansas Natural Resources Conference, Wichita, KS (poster)	31 Jan 2014
*Williams E.J. and W.A. Boyle. "Does food abundance affect within-season dispersal behavior of male Grasshopper Sparrows?" Kansas Natural Resources Conference, Wichita, KS (poster)	31 Jan 2014
*Williams E.J. and W.A. Boyle. "Does food abundance affect within-season dispersal behavior of male Grasshopper Sparrows?) Midwest Fish and Wildlife Society, Kansas City, MO (poster)	27 Jan 2014
Boyle, W.A. and B. J. Sigel. "Ongoing change in the avifauna of La Selva Biological Station." American Ornithologists' Union / Cooper Society, Chicago, IL (oral)	14 Aug 2013
Boyle, W.A. , B.K. Sandercock and K. Martin. "Avian life history variation along elevational gradients: a global meta-analysis". Ecological Society of America, Minneapolis, MN (oral)	8 Aug 2013

Boyle, W.A. and B. J. Sigel. "Ongoing change in the avifauna of La Selva Biological Station: Insights from 23 years of Christmas Bird Counts" Association of Tropical Biology and Conservation, San José, Costa Rica (oral)	24 Jun 2013
Boyle, W.A. , D. W. Winkler, and C.G. Guglielmo. "When and how do Tree Swallow chicks die during cold weather?" Society for Integrative and Comparative Biology, San Francisco, CA (oral)	4 Jan 2013
North American Ornithological Conference, Vancouver, BC	17 Aug 2012
Society for Integrative and Comparative Biology, Charleston, SC	7 Jan 2012
American Ornithologists' Union, Jacksonville, FL	28 July 2011
Ecological Society of America, Milwaukee, WI	8 Aug 2008
American Ornithologists' Union, Laramie, WY	10 Aug 2007
North American Ornithological Congress, Veracruz, Mexico	6 Oct 2006
Ecological Society of America, Memphis, TN	7 Aug 2006
American Ornithologists' Union, Santa Barbara, CA	26 Aug 2005
Ecological Society of America, Montreal, Canada	9 Aug 2005
Southwestern Association of Biologists, Portal, AZ	27 Oct 2003
North American Ornithological Congress, New Orleans, LA	26 Sep 2002
"Birds of Two Worlds" Symposium, Smithsonian Institution, Shepherdstown, WV	8 Mar 2002
PUBLIC ENGAGEMENT PRESENTATIONS AND PRODUCTS:	
upcoming: Public Lecture, Sam Noble museum, University of Oklahoma, Norman, OK	postponed due to COVID
Boyle, W.A. "A prairie bird's love-hate relationship with humans". Ulrich Museum, Wichita KS	26 Oct 2021
Boyle, W.A., K. Silber, M.J. Reynaldo, and E.N. Sroor. "Grassland Bird Behavior and Ecology". Presentation and hands-on interactive session with ~40 members of the public regarding the core topics of grassland birds conservation, demography, and climate. Designed by whole lab group and delivered by PI, PhD student, and undergraduates.	10 Sep 2021
Boyle, W.A. and *E.H. Shogren. "An introduction to the concept o"f the	21 Jul 2020
"Hygric Niche"" Video created to explain key figures in article published in Trends in Ecology and Evolution.	l
https://www.youtube.com/watch?v=4XkEvFZaZsY&t also disseminated on the "Figure360" playlist on the Cell Press YouTube channel.	
*Shogren, E.H., §J. Gresham, §A.J. Roe, *K. Silber, *D.J. Smith, §M.K. Wilcox, *S.K. Winnicki, and W.A. Boyle. "Dance Dance Evolution" Video created by entire lab group about parts of our tropical research. https://www.youtube.com/watch?v=fSXKTfy sE	Apr 2020
· · · · · · · · · · · · · · · · · · ·	16 Oct 2018 &
long program of outdoor, interactive education organized by the Kansas Forest Service	18 Jun 2019

Boyle, W.A. and *E.H. Shogren. "Aves del Parque Nacional Volcán Jun 2018-Tenorio / Birds of Volcán Tenorio National Park" and "Saltarín present Gorgiblanco / White-ruffed Manakins." Two interpretive signs created for our current research site in Costa Rica, placed at entrance receiving over 80K visitors annually. Boyle, W.A. "Sex, fruit, and rock-n-roll: how manakins became the 28 Apr 2018 tropics' dance idols." KEYNOTE ADDRESS; Kansas Birding Festival, Milford, KS. Boyle, W.A. "Sex, fruit, and rock-n-roll: how manakins became the 22 Apr 2018 tropics' dance idols." Evening public outreach talk representing the manakin genomics RCN to members of the local scientific and nonscientific community. Gamboa, Panama. Boyle, W.A. "The surprising mobility of grassland birds: what we know, 19 Apr 2018 what we don't know, and why it matters." Presentation to the Kansas Master Naturalists training program. Olathe, KS. *Winnicki, S. K., §M. K. Wilcox, §D. J. Smith. "Wonderful World of 3 Mar 2018 Bird Migration" Two workshops teaching scientific method and core concepts in migration ecology. Enhancing your Future with Mathematics and Science conference for middle school girls, Emporia State University, Emporia, KS Boyle, W.A., "Dancing in the rain; sex and survival of rainforest birds." 21 Feb 2018 Public presentation and discussion at Science on Tap, Tallgrass Tap House, Manhattan, KS. This event also covered in a Science Snapshots blog post by *S.K. Winnicki (https://sciencesnapshots.com/2018/02/28/science-on-tap-rainmigration-and-dancing-birds/) *Winnicki, S.K. "Prairie babies: developmental variation and survival in Nov & Dec changing environments." hands-on game for children and their 2018 families at multiple Science Saturday events, Sunset Zoo, Manhattan, KS *Shogren, E.H. and W.A. Boyle "Research on Corapipo altera in 15 Jun 2017 Volcán Tenorio National Park." Estes Park Environmental Center Field Trip, El Pilón, Costa Rica *Aulicky, C., S. Replogle Curnutt, *M.R. Herse, *E.H. Shogren, *B. Apr 2017 Verheijen, *E.J. Williams, *S.K. Winnicki, and W.A. Boyle. "More than meets the eye: Boyle lab research into the private lives of Kansas grassland birds" Video conceived and produced by entire lab group about our grassland research. https://www.youtube.com/watch?v=1TbUEQHJjZs&t=12s Boyle, W.A. "A Year in the Life of a Tallgrass Prairie" Video visualizing Apr 2017 changeability and beauty of tallgrass prairie. https://www.youtube.com/watch?v=G5vJnGhUCxM&t=2s

Boyle, W.A. and *S.K. Winnicki. "Wonderful World of Birds" and two career discussion sessions. Enhancing your Future with Mathematics and Science conference for middle school girls, Emporia State University, Emporia, KS	4 Mar 2017
*Herse, M.R. "How do birds choose habitats? A landscape perspective." Public presentation and discussion at Science on Tap, Tallgrass Tap House, Manhattan, KS	18 Jan 2017
Boyle, W.A. "The Wonderful World of Birds". Hands-on workshops with middle school girls as part of the Expanding Your Futures in Mathematics and Science conference, Emporia, KS	5 Mar 2016
Boyle, W.A. "Why the cool girls play in the mud". Career workshops with middle school girls as part of the Expanding Your Futures in Mathematics and Science conference, Emporia, KS	7 Mar 2015
Boyle, W.A., *E.J. Williams, *M.R. Herse, "Take flight!" Hands on workshop for grade-schoolers and their families at the STEM Fun Night, Lee Elementary School, Manhattan, KS	26 Feb 2015
Boyle, W.A. "Inside the KSU ornithology collection". Presentation to Flint Hills chapter of the National Audubon Society, Manhattan, KS	9 Mar 2014
Boyle, W.A. and *E.J. Williams. "Birds of a feather moonwalk together". Presentation to middle school girls as part of the Expanding Your Futures in Mathematics and Science conference, Emporia, KS	8 Mar 2014
Boyle, W.A. "The Clue in the Stormy Jungle or why science is like a murder mystery". Presentation to Jayhawk chapter of the National Audubon Society, Lawrence, KS	27 Oct 2013
Boyle, W.A. "Cambios en el avifauna de la estación biológica La Selva: 23 años de Conteos Navideños". Spanish language talk on long-term changes to La Selva's avifauna to staff and researchers at La Selva Biological Station, Costa Rica	2 Jul 2013
Boyle, W.A. Presentations (2) to KSU's undergraduate student chapter of The Wildlife Society, Manhattan,, KS	2013 & 2014
Boyle, W.A. Four, 1-hour presentations to groups of 7 th grade students, Desert Sky Middle School, Tucson, AZ	2006
Boyle, W.A. Presentations to school children through the University of Arizona/NASA Space Grant Science Speakers Program, Tucson, AZ	2005
TEACHING AND MENTORING	
Instructor:	
Graduate Seminar in Behavioral Ecology, Division of Biology, Kansas State University	2021-present
Ornithology, Division of Biology, Kansas State University	2014-present
Applied Methods in Population and Statistical Ecology (BIO), crosslisted & co-taught with Trevor Hefly (STATS), Kansas State University	2019–present
Topics: Advanced Methods in Field Ornithology, Division of Biology,	2016–2018

Kansas State University Senior Capstone Seminar in Biology, Department of Biology, University Spring 2009 of Western Ontario Techniques in Physiology and Biochemistry, Department of Biology, Fall 2007 University of Western Ontario Ornithology, Department of Ecology and Evolutionary Biology, Spring 2007 University of Arizona TEACHING ASSISTANT AND LAB INSTRUCTOR: Department of Ecology and Evolutionary Biology, University of Arizona: **Environmental Biology** (3rd year non-majors) Spring 2006 Animal Behavior (senior/grad level) Fall 2005 Spring 2005 **Ornithology** (senior/grad level) **Ecology** (core 3rd year level--TEACHING AWARD FOR THIS COURSE) Fall 2001

MENTORING, FIELD COURSES, OTHER TEACHING:

Post-doctoral mentor

Nikole Freeman; 2021–present

Graduate advisor

Kristen Hobbs; PhD, 2021–present Katy Silber; PhD, 2019–present Dylan Smith; MS, 2019–present Elsie Shogren; PhD, 2015–2020 Sarah Winnicki; MS, 2016–2019 Carly Aulicky; PhD, 2015–2017 Mark Herse; MS, 2015–2017 Emily Williams; MS, 2013–2016

External graduate student mentor

Megan Jones (Florida State U), Andy Boyce (U Arizona; AOS young professional mentoring program), Heather Kraus (Emporia State U)

Undergraduate mentor

Kansas State undergrads

Miriam Reynaldo, Sara Blunk, Elizabeth Sroor, Henry Castro-Miller	2021
Miriam Reynaldo, Elizabeth Sroor, Daniel Wells, Kailyn Underwood, Sara Blunk, Louis Kokenge	2020
Joanna Gresham, Miriam Reynaldo, Austin Roe, Ryan Donnelly, Muriel Winnerman	2019
Mary Kate Wilcox, Dylan Smith, Natasha Bergevine, Logan Thomas, Joanna Gresham, Blair Pfeifer, Hannah Choo	2018
Michaela Gustafson, Natasha Bergevine, Cole Allen, Logan Thomas Katelyn Thompson, Mary Kate Wilcox	2017
Michaela Gustafson, Suzy Replogle, Destiny Hett, Jessica Nguyen, Caitlin Weichman, Lauren Angermayer	2016

Caroline Doty, Jacqueline Gehrt, Justin Leon, Amanda Moraes Charpinel, Suzy Replogle, Breyana Ramsey, Dylan Smith, Amie Sommers, Chelsea Sink	2015
Alex Henry, Chyna Pei, Willow Malone, Alexandra McChesney, Hunter Nedland, Dylan Smith, Amie Sommers, Blake Walters	2014
Allison Bays, Sarah Demadura, Keil Gary, Chyna Pei, Ian Waters	2013
K-State Developing scholars program	
Breyana Ramsey (2014–15)	
K-State REU program	
Dylan Smith (KSU, 2018), Braiam Rosado (Universidad de Turabo, 2017), Edwin Harris (Beloit College, 2017), Darrien Savage (KSU, 2017), Yisel Márquez (Weber State University; 2015), Sarah Winnicki (Dennison U., 2014 & 2015), Steffanie Munguia (U. South Florida; 2013)	
K-State SCTE program	
Justin Leon (2014), Emily Samuel (2016)	
Mentorship training	
Completed all three interactive modules focusing on best practices for mentoring at multiple career stages (sponsored by the National Research Mentoring Network (NRMN) and University of Minnesota Clinical and Translational Science Institute (CTSI)	2020
Founded and organized departmental writing club	2020-present
e i e	2020 present
Post-doctoral mentoring program	2012–2013
Post-doctoral mentoring program Co-organized bi-weekly meetings, KSU Division of Biology	-
Post-doctoral mentoring program Co-organized bi-weekly meetings, KSU Division of Biology Committee member	-
Post-doctoral mentoring program Co-organized bi-weekly meetings, KSU Division of Biology Committee member K-State—Sarah Herzog (2020–present), Narmadha Meenabhashini Mohankumar (Statistics; 2019–present), Nick Barts (2015–present), Bram Verheijen (2012–2017), Courtney Passow (2014–2016), Kayla Gerber (2012–2015), Brian Kearns (2012–2015), Zachary Peterson (2012–2015), Joseph Lautenbach (2012–2014), Andrew Stetter (2013–2014), Lyla Hunt (2013)	-
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Post-doctoral mentoring program Co-organized bi-weekly meetings, KSU Division of Biology Committee member K-State—Sarah Herzog (2020–present), Narmadha Meenabhashini Mohankumar (Statistics; 2019–present), Nick Barts (2015–present), Bram Verheijen (2012–2017), Courtney Passow (2014–2016), Kayla Gerber (2012–2015), Brian Kearns (2012–2015), Zachary Peterson (2012–2015), Joseph Lautenbach (2012–2014), Andrew Stetter (2013–2014), Lyla Hunt (2013) U Arizona—Carl Lundblad (2011-2014) Guest lecturer Ecology of Animal Migration, Centre for Animal Movement Research (CAnMove), Department of Biology, Lund University, Sweden	2012–2013 Nov 2019
Post-doctoral mentoring program Co-organized bi-weekly meetings, KSU Division of Biology Committee member K-State—Sarah Herzog (2020–present), Narmadha Meenabhashini Mohankumar (Statistics; 2019–present), Nick Barts (2015–present), Bram Verheijen (2012–2017), Courtney Passow (2014–2016), Kayla Gerber (2012–2015), Brian Kearns (2012–2015), Zachary Peterson (2012–2015), Joseph Lautenbach (2012–2014), Andrew Stetter (2013–2014), Lyla Hunt (2013) U Arizona—Carl Lundblad (2011-2014) Guest lecturer Ecology of Animal Migration, Centre for Animal Movement Research (CAnMove), Department of Biology, Lund University, Sweden Isotope Ecology, Kansas State University	2012–2013 Nov 2019 2016
Post-doctoral mentoring program Co-organized bi-weekly meetings, KSU Division of Biology Committee member K-State—Sarah Herzog (2020–present), Narmadha Meenabhashini Mohankumar (Statistics; 2019–present), Nick Barts (2015–present), Bram Verheijen (2012–2017), Courtney Passow (2014–2016), Kayla Gerber (2012–2015), Brian Kearns (2012–2015), Zachary Peterson (2012–2015), Joseph Lautenbach (2012–2014), Andrew Stetter (2013–2014), Lyla Hunt (2013) U Arizona—Carl Lundblad (2011-2014) Guest lecturer Ecology of Animal Migration, Centre for Animal Movement Research (CAnMove), Department of Biology, Lund University, Sweden Isotope Ecology, Kansas State University Population Biology, Kansas State University Nature of Biological Things (non-majors), Physiology of Migration	2012–2013 Nov 2019 2016 2016 2009, 2010, &
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Post-doctoral mentoring program Co-organized bi-weekly meetings, KSU Division of Biology Committee member K-State—Sarah Herzog (2020—present), Narmadha Meenabhashini Mohankumar (Statistics; 2019—present), Nick Barts (2015—present), Bram Verheijen (2012—2017), Courtney Passow (2014—2016), Kayla Gerber (2012—2015), Brian Kearns (2012—2015), Zachary Peterson (2012—2015), Joseph Lautenbach (2012—2014), Andrew Stetter (2013—2014), Lyla Hunt (2013) U Arizona—Carl Lundblad (2011-2014) Guest lecturer Ecology of Animal Migration, Centre for Animal Movement Research (CAnMove), Department of Biology, Lund University, Sweden Isotope Ecology, Kansas State University Population Biology, Kansas State University Nature of Biological Things (non-majors), Physiology of Migration (upper-level majors); University of Western Ontario, London ON Animal Behavior, University of Guelph, Guelph ON	2012–2013 Nov 2019 2016 2016 2009, 2010, & 2011 2007 & 2010

Organization for Tropical Studies Tropical Biology 2002, 2003, Week-long guest faculty member, OTS Tropical Biology graduate field 2016 courses, directed short graduate student field projects Research Experience for Undergraduates (REU) program, La Selva Summers **Biological Station, Costa Rica** 2007 & Two (of 3) mentored students published their research projects and are now 2005 pursuing academic careers in biology (1 is tenure-track faculty member) Department of Ecology and Evolutionary Biology, University of 2001-2009 Arizona and Department of Biology, University of Western Ontario Mentor to > 35 assistants from Costa Rica, Colombia, Spain, Australia, Canada and USA in the field

LEADERSHIP, SERVICE, AND INTERNATIONAL EXPERIENCE

Professional Societies:

Co-leader and organizer of Research Coordination Network meetings resulting from successful NSF RCN grant: "Enabling comparative studies of the process and products of sexual selection in a genomic context"; (1) Front Royal VA, 14–17 August 2015; (2) Annapolis MD, 13–16 August 2016; (3) Gamboa, Panama, 21–26 April 2018; (4) Curitiba, Brazil, 31 Sep–5 Oct 2019

Elected Council member (2020-2021) American Ornithological Society

Steering committee member, Central grasslands roadmap summit: a conservation roadmap for the future, conference Aug 2020 and ongoing efforts

Chair (2016-2019) and previously co-chair (2014–2016) of the Publications Advisory Committee, American Ornithological Societies

Editorial Board Member for Ecological Society of America's journal, Ecosphere (2013–2019)

Board member, Cooper Ornithological Society 2013–2016. Chair, student presentations awards (2014-2015).

Organizer and moderator, Symposium "The process and products of sexual selection: Ecology, behavior, genomics, and physiology of manakins," North American Ornithological Congress, Aug 2020

Co-organizer and moderator, Plenary panel discussion "Promoting Diversity in Conservation"; Kansas Natural Resources Conference, Manhattan KS (February 2018)

Co-organizer, symposium "lpine Ornithology in 2014: ecological adaptations and challenges for birds breeding in mountain ecosystems"; AOU/COS/SCO-SOC Joint Annual Meeting, Estes Park, CO (September 2014)

Travel grant reviewer, International Ornithological Congress, (2014)

Student fellowship reviewer, Neotropical Ornithological Society (2013, 2014)

Chair, Media Committee, 5th North American Ornithological Conference, Vancouver, Canada (2012)

Judge, student presentation awards, multiple societies/conferences (SICB 2012; TWS 2012 & 2015; ESA 2013; AOU/COS 2013, 2014, 2015; KNRC 2018; NAOC 2016 & 2020)

Reviewer:

Granting agencies and publishers: National Science Foundation of the USA (panelist Jan 2014, panelist Oct 2016, ad-hoc reviewer [4 proposals]), Environmental Protection

Agency (panelist Jan 2013), National Geographic Society (3 ad hoc reviews), Swiss National Science Foundation (1 ad hoc review) Princeton University Press.

Journals (100 reviews/91 at KSU): American Midland Naturalist (1), American Naturalist (2), Avian Conservation and Ecology (4), Animal Behavior (1), Behavioural Ecology (1), Behavioural Ecology & Sociobiology (1), Biological Conservation (2), Biological Journal of the Linnean Society (1), Biological Reviews (1), Biology Letters (2), Biotropica (3), Bird Conservation International (2), Bull. Kansas Ornithological Soc. (1), Canadian Journal of Forest Research (1), Canadian Journal of Zoology (1), Ecological Applications (1), Ecology (4), Ecology Letters (3), Ecosphere (2), Ecosystems (1), Frontiers in Ecology and the Environment (2), Functional Ecology (2), Global Ecology and Biogeography (1), Journal of Animal Ecology (9), Journal of Arid Environments (1), Journal of Avian Biology (2), Journal of Experimental Zoology (1), Journal of Field Ornithology (5), Journal of Ornithology (3), Journal of Theoretical Biology (2), Journal of Tropical Ecology (3), Journal of Zoology (1), Oecologia (2), Oikos (2), Ornithology (formerly The Auk: Ornithological Advances) (8), Ornithological Applications (formerly The Condor: Ornithological Applications) (1), PLoS One (2), Proceedings of the National Academy of Sciences (1), Proceedings of the Royal Society-B (2), Royal Society Open Science (2), Science (1), Tropical Conservation Science (1), Western N. American Naturalist (1), Wilson Journal of Ornithology (3), Zoological Studies (2)

Other external evaluations: U. Nebraska MS thesis award, South Africa MS thesis external examiner, external Tenure & Promotion evaluations (2), federal employee pre-submission ms reviews (5)

Departmental service: Diversity & Inclusion committee (2020–present), Faculty search committees (2018, 2 positions; 2017–2018; 1 position), Graduate student recruiting committee (2014–2019), EEB seminar committee (2014–2016), EEB grads on parade judge (2012, 2013), Biology graduate students research forum (2013), REU program (student selection, field trips, ethics and social media workshops; 2013–2017), UBC Dept. of Forest Sciences student research awards (2011)

University service: University-wide joint REU-SUROP poster session judge, Jul 2013; Panelist for the KAWSE Advance Distinguished Lecturer Series lunch, 27 Feb 2017

Birding guide: tour leader for Victor Emmanuel Nature Tours in Mexico (2001–2005)

Founder and organizer: graduate student discussion series (U Arizona, 2001–2003), avian research discussion forum (UWO, 2007–2008)

Languages: native English speaker, fluent Spanish (read, write, speak), some French & Portuguese

Research assistant: forest community inventories in Mexico, Ecuador, and Costa Rica (tropical plant ID, collection, herbarium work; part time 1990–1994)

Student-led cross-disciplinary applied research: helped organize and participated in "Students Integrating Academics and Conservation effort in Desert Grasslands", Los Fresnos, Mexico (http://eeb19.biosci.arizona.edu/siac/)

RESEARCH FEATURED IN PRESS AND OTHER MEDIA

"Importance of rainfall highlighted for tropical animals"; press release for research article prepared by U. Illinois and picked up by news outlets globally

"A grassland bird's changing world"; research featured in K-State student Callie Ogborn's

- project, highlighted on Science360 and winner of the Kansas Broadcasting Association's student award. https://www.youtube.com/watch?v=rbrIyc4sbQ0
- Boyle Lab YouTube channel showcases several videos created and produced by lab members about the aims, methods, and outcomes of our research:

 https://www.youtube.com/channel/UCiQiNb9syQ5F455XielMjDA
 Cumulative views (Aug 2020): >4K
- Comparative migration research highlighted in textbook; S. E. Nordell and Valone. T. J., 2013, *Animal Behavior: Concepts, Process, Application*. Oxford University Press
- Interview on *Quirks and Quarks*, (Canadian Broadcasting Corporation's national radio science program), Apr 2011. http://www.cbc.ca/quirks/episode/2011/04/09/april-9-2011/
- U Guelph Press, Birds Must Choose Between Mating, Migrating, 6 April 2011 reprinted broadly online including at Science Daily News, PhysOrg, e!ScienceNews.
- Interview on the **Canadian Broadcasting Corporation's** national radio science program, *Quirks and Quarks*, Apr 2010. http://www.cbc.ca/quirks/archives/09-10/qq-2010-04-24.html
- Science Magazine's ScienceNOW, http://news.sciencemag.org/sciencenow/2010/04/rainy-days-stress-out-birds.html, Apr 2010
- Interviewed and featured on KXCI's *Arizona Illustrated*, **National Public Television**, Tucson, Mar 2007
- Spanish-language interview and story, **El Imparcial** newspaper, Mexico, Apr 2007 University of Arizona's **Visitor Guide Magazine**, Fall 2007