

**W. ALICE BOYLE**

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**ACADEMIC APPOINTMENTS**

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

**TRAINING**

<b>Ph.D.</b> , Department of Ecology and Evolutionary Biology, <b>University of Arizona</b> <i>Minor: School of Natural Resources. Advisers: Dr. J. L. Bronstein and Dr. C. J. Conway</i>	Dec 2006
<b>B. Mus.</b> , <b>University of British Columbia</b> <i>Viola performance, 1st Class</i>	May 1990

**AWARDS AND HONORS**

MARION JENKINS SERVICE AWARD, American Ornithological Society	2019
University-wide faculty SCIENCE COMMUNICATION AWARD, Kansas State University	2019
ELECTED FELLOW of the American Ornithological Society	2017
Editorial Board member, ESA's open access journal, <i>Ecosphere</i>	2013–2019
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 Award, University of Arizona Alumni Association	2001

**PUBLICATIONS**

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

**IN REVIEW/REVISION:**

40. 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; 100% KSU)
39. 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 (submitted Apr 2019; 5% of contribution Boyle lab; 100% KSU)
38. Bruckerhoff, L., K. Connell, J. Guinnip, E. Adhikari, A. Godar, K. Gido, **W. A. Boyle**, A. Hope, A. Joern, E. Welti. Grassland plant and animal communities respond uniquely to variation in climate and land management. *Ecology* (in revision, first submitted Feb 2019; 5% of contribution Boyle lab; 100% KSU)
37. \*Winnicki, S. K., §S. M. Munguía, \*E. J. Williams, and **W. A. Boyle**. Social interactions do not drive territory aggregation in a grassland songbird. *Ecology* (in review; 100% of contribution Boyle lab; 100% KSU)
36. 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; 100% KSU)
35. †Burnett, K., †M. N. Zippel, †L. T. Phillips, †P. Pawar, L. P. McGuire, and **W. A. Boyle**. Nocturnal reductions in body temperature in high elevation Neotropical birds. *Tropical Ecology* (submitted Oct 2018; 40% of effort Boyle lab; 100% of effort KSU)

**PUBLISHED PEER-REVIEWED:**

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/jof.12290 (80% Boyle lab; data collected pre-KSU but all analyses and writing KSU effort)
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  $\beta$ -hydroxybutyrate analysis, *J. Field Ornithology* **88**:399-404; doi:10.1111/jof.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 Ecomusicology*, 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 [Ellen Koskoff Edited Volume Prize](#) 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 understory 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

#### OTHER PUBLICATIONS AND PRODUCTS:

11. \*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)
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, 90% KSU)
9. **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
2. **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:**

<b>Boyle, W. A.</b> and T. Hefley; NSF "What are the environmental causes of population variability of highly mobile animals?" (\$542,060)	2018–2021
<b>Boyle, W. A.</b> ; NSF "EAGER: Climatic drivers of demography and reproductive behavior of tropical birds" (\$200,000)	2016–2018
Johnson, L. (PI), 2 other co-PIs and <b>W. A. Boyle</b> (co-PI), "Integrative Graduate Training for New Frontiers in Ecology, Evolution, and Genomics", GAANN (\$256,327)	2016–2019
<b>Boyle, W. A.</b> ; NSF EPSCoR First Award "Consequences of climate variability for prairie birds." (\$77,712)	2016
Loiselle, B. A., Balakrishnan, C. N., <b>W. A. Boyle</b> , M. Braun, and E. 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
<b>Boyle, W. A.</b> ; 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:**

<b>Boyle, W. A.</b> ; K-State BRIEF program conference travel support (\$2000)	2017
<b>Boyle, W. A.</b> ; Kansas State ADVANCE distinguished lecture series awardee (\$1400)	2017
<b>Boyle, W. A.</b> ; Dispersal and Migratory Connectivity of a Declining Grassland Songbird", Kansas State University USRG fund (\$5331)	2015–2016
<b>Boyle, W. A.</b> ; Kansas State ADVANCE distinguished lecture series award (\$1200)	2014
<b>Boyle, W. A.</b> ; Kansas State ADVANCE distinguished lecture series awardee (\$1200)	2014
<b>Boyle, W. A.</b> ; Kansas State Mentoring Fellowship Award (\$6,000)	2013
<b>Boyle, W. A.</b> ; K-State BRIEF program conference travel support (\$1800)	2013
<b>Boyle, W. A.</b> ; 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	2001–2006

separate awards totaling \$4,650)	
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

**SEMINARS AND PRESENTATIONS** (underlining denotes presenter, bold font denotes Boyle lab member)**EXTERNAL RESEARCH SEMINARS:**

<i>upcoming</i> : "From dance moves to dispersal: rainfall and the ecology of tropical and grassland birds." Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ	12 Nov 2019
<i>upcoming</i> : "Population biology of tallgrass prairie birds: from dispersal to drought." School of Natural Resources and the Environment, University of Arizona, Tucson, AZ	20 Nov 2019
<i>upcoming</i> : GRADUATE-STUDENT INVITED SEMINAR SPEAKER, Department of Biological Science, Florida State University, Tallahassee, FL	16 Jan 2020
<b>Boyle, W.A.</b> "From dance moves to dispersal: rainfall and the ecology of tropical & grassland birds." GRADUATE-STUDENT INVITED SEMINAR SPEAKER, Odum School of Ecology, University of Georgia	26 Feb 2019
<b>Boyle, W.A.</b> "Population biology of tallgrass prairie bird birds: from dispersal to drought." GRADUATE-STUDENT INVITED SEMINAR SPEAKER, Department of Natural Resources and Environmental Sciences, University of Illinois Urbana-Champaign, Urbana, IL	18 Jan 2019

- Shogren, E. H.** and **W. A. Boyle.** “Investigación de *Corapipo altera* en Parque Nacional Volcán Tenorio.” Sistema Nacional de Áreas de Conservación, El Pilon, Costa Rica 20 Jun 2018
- Shogren, E. H.** and **W. A. Boyle.** “Dancing in the rain: selective drivers of variability in a Neotropical manakin.” Benedictine College Biology Colloquium, Atchison, KS 9 Nov 2017
- Shogren, E. H.** and **W. A. Boyle.** “Investigación de *Corapipo altera* en Parque Nacional Volcán Tenorio.” Sistema Nacional de Áreas de Conservación, El Pilon, Costa Rica 16 Jun 2017
- Herse, M. R.**, M. E. Estey, P. J. Moore, B. K. Sandercock, and **W. A. Boyle.** “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](https://www.youtube.com/watch?v=_QJTbdrO6IM&t=53s) 29 Mar 2017
- Boyle, W. A.** “Consequences of rain for rainforest birds” Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL 27 Feb 2017
- Boyle, W. A.** “Causes and consequences of animal movement: case studies of tropical forest and temperate grassland birds” Wichita State University, Wichita, KS 6 Feb 2017
- Boyle, W. A.** “Consequences of rain for rainforest birds” Texas Tech University, Lubbock, TX 26 Oct 2016
- Boyle, W. A.** “Consequences of rain for rainforest birds” Department of Biology, University of Nebraska Omaha, Omaha, NE 24 Feb 2016
- Boyle, W. A.** “Consequences of rain for rainforest birds” Department of Biological Sciences, Auburn University, Auburn, AL 19 Nov 2015
- Boyle, W. A.** “Evolución de la migración: sistemas migratorios latitudinales y altitudinales en regiones tropicales y templadas” WORKSHOP: *Técnicas de Investigación en Ecología de Aves*, Universidad Austral de Chile, Valdivia, Chile 6 Oct 2015
- Boyle, W. A.** “Patterns and causes of grassland bird dispersal movements over multiple spatial and temporal scales” Washington College, Chestertown, CT 16 Jun 2015
- Boyle, W. A.** “Causes and consequences of animal movement: case studies of tropical forest birds and temperate grassland birds” Department of Biology, Emporia State University, Emporia, KS 25 Mar 2015
- Boyle, W. A.** “Causes and consequences of animal movement: case studies of tropical forest birds and temperate grassland birds” Organismal Biology and Ecology, University of Montana, Missoula, MT 18 Mar 2014
- Boyle, W. A.** “Consequences of rain for rainforest birds” Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT 11 Apr 2014
- Boyle, W. A.** “Consequences of rain for rainforest birds” Program in Ecology, Evolution, and Conservation Biology, University of Illinois, Champaign, IL 26 Feb 2014



- Boyle, W. A.** “Consequences of rain for rainforest birds: migration, life history, and conservation” Biology Department, University of New Mexico. Albuquerque, NM 6 Dec 2013
- Boyle, W. A.** “Altitudinal migration mediates life history trade-offs in tropical birds” Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS 3 Sep 2013
- Boyle, W. A.** “Altitudinal migration mediates life history trade-offs in tropical birds” Department of Ecology and Evolutionary Biology, Tulane University, New Orleans, LA 1 Feb 2013
- Boyle, W. A.** “Altitudinal migration mediates life history trade-offs in tropical birds” Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 30 Nov 2012
- 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, BC 21 Nov 2011
- 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:**
- W. A. Boyle.** “From dispersal to dance moves: rainfall and the ecology of grassland & tropical birds.” Division of Biology, Kansas State University. Manhattan, KS 31 Aug 2019

- \*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<sup>th</sup> 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 CONFERENCE PRESENTATIONS (underlining denotes presenter)**
- 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 7 Oct 2017

- Ornithological Society, Junction City, KS
- Boyle, W. A.** “Evaluating hypotheses for animal movement strategies”. 22 Mar 2017  
Gordon Research Conference on Movement Ecology of Animals. Ventura, CA
- Boyle, W. A.** “The current and future of tropical frugivores in a changing climate: insights and challenges”. 20 Aug 2016  
North American Ornithological Conference, Washington, DC
- 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 (*Corapipo altera*)”. 18 Aug 2016  
North American Ornithological Conference, Washington, DC
- Boyle, W. A.** “*Corapipo* manakins”. 14 Aug 2016  
Second meeting of the Manakin Genomics RCN, Annapolis, MD
- \***Aulicky, C.** and **W. A. Boyle** “*Lepidothrix* manakins”. 14 Aug 2016  
Second meeting of the Manakin Genomics RCN, Annapolis, MD
- 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”. 15 July 2015  
Eastern Tallgrass and Big Rivers Landscape Conservation Cooperative meeting, Manhattan, KS
- Boyle, W. A.** “Altitudinal migration in the Americas”. 24 Sep 2014  
American Ornithologists’ Union / Cooper Ornithological Society, Estes Park, CO
- Boyle, W. A.**, B. K. Sandercock, and K. Martin. “Vertebrate life history variation along elevational gradients: a global meta-analysis”. 16 Oct 2012  
The Wildlife Society meeting, Portland, OR
- 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, University of Neuchâtel, Switzerland 1 Feb 2008

#### CONTRIBUTED CONFERENCE PRESENTATIONS

- \***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 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 Jul 2019
- \***Shogren, E. H.** and **W. A. Boyle**. “Dancing drives evolution of sexual size dimorphism in manakins”. Animal Behavior Jul 2019
- \***Winnicki, S. K.** and **W. A. Boyle**. “Direct effects of Brown-headed Cowbird (*Molothrus ater*) brood parasitism on the growth and development of grassland songbirds.” American Ornithological Society, Anchorage, AK Jun 2019

- \***Smith, D. J.** and **W. A. Boyle**. “Effects of drought on grassland songbirds: reproductive responses and trophic drivers.” American Ornithological Society, Anchorage, AK Jun 2019
- \***Shogren, E. H.** and **W. A. Boyle**. “Dancing drives evolution of sexual size dimorphism in manakins”. Evolution Jun 2019
- \***Winnicki, S. K.** and **W. A. Boyle**. “Indirect effects of Brown-headed Cowbird (*Molothrus ater*) brood parasitism on the growth and development of grassland songbirds.” Southwestern Association of Naturalists, Chihuahua, Mexico Apr 2019
- \***Winnicki, S. K.** and **W. A. Boyle**. “Direct effects of Brown-headed Cowbird (*Molothrus ater*) 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 (*Molothrus ater*) 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 Brown-headed Cowbird (*Molothrus ater*) 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 (*Ammodramus savannarum*) 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.S.-International 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 (*Ammodramus savannarum*) 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 multi-scale 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 *THE WILDLIFE SOCIETY* FOR BEST STUDENT PRESENTATION) 5 Feb 2016

- Boyle, W. A.** “Patterns of breeding dispersal in a declining grassland bird”, 19 Oct 2015  
The Wildlife Society national meeting, Winnipeg, Manitoba, Canada (oral)
- \***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 multi-scale 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:**

<b>Boyle, W.A.</b> Presentations on woodland-associated birds during a day-long program of outdoor, interactive education organized by the Kansas Forest Service	16 Oct 2018 & 18 Jun 2019
<b>Boyle, W.A. and *E. H. Shogren.</b> "Aves del Parque Nacional Volcán Tenorio / Birds of Volcán Tenorio National Park" and "Saltarín Gorgiblanco / White-ruffed Manakins." Two interpretive signs created for our current research site in Costa Rica, placed at entrance receiving over 80K visitors annually.	installed Jun 2018
<b>Boyle, W.A.</b> "Sex, fruit, and rock-n-roll: how manakins became the tropics' dance idols." KEYNOTE ADDRESS; Kansas Birding Festival, Milford, KS.	28 Apr 2018
<b>Boyle, W.A.</b> "Sex, fruit, and rock-n-roll: how manakins became the tropics' dance idols." Evening public outreach talk representing the manakin genomics RCN to members of the local scientific and non-scientific community. Gamboa, Panama.	22 Apr 2018
<b>Boyle, W.A.</b> "The surprising mobility of grassland birds: what we know, what we don't know, and why it matters." Presentation to the Kansas Master Naturalists training program. Olathe, KS.	19 Apr 2018
<b>*Winnicki, S. K., §M. K. Wilcox, §D. J. Smith.</b> "Wonderful World of 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	3 Mar 2018
<b>Boyle, W.A.,</b> "Dancing in the rain; sex and survival of rainforest birds." Public presentation and discussion at Science on Tap, Tallgrass Tap House, Manhattan, KS. This event also covered in a <i>Science Snapshots</i> blog post by <b>*S. K. Winnicki</b> ( <a href="https://sciencesnapshots.com/2018/02/28/science-on-tap-rain-migration-and-dancing-birds/">https://sciencesnapshots.com/2018/02/28/science-on-tap-rain-migration-and-dancing-birds/</a> )	21 Feb 2018



- \*Winnicki, S. K.** “Prairie babies: developmental variation and survival in changing environments.” hands-on game for children and their families at multiple Science Saturday events, Sunset Zoo, Manhattan, KS Nov & Dec 2018
- \*Shogren, E. H.** and **W.A. Boyle** “Research on *Corapipo altera* in Volcán Tenorio National Park.” Estes Park Environmental Center Field Trip, El Pilón, Costa Rica 15 Jun 2017
- \*Aulicky, C., S. Replogle Curnutt, \*M. R. Herse, \*E. H. Shogren, \*B. 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. Apr 2017  
<https://www.youtube.com/watch?v=ITbUEQHJjZs&t=12s>
- Boyle, W. A.** “A Year in the Life of a Tallgrass Prairie” Video visualizing changeability and beauty of tallgrass prairie. Apr 2017  
<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<sup>th</sup> 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:

- 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 Spring 2019
- Topics: Advanced Methods in Field Ornithology**, Division of Biology, Kansas State University 2016–2018
- Senior Capstone Seminar in Biology**, Department of Biology, University of Western Ontario Spring 2009
- Techniques in Physiology and Biochemistry**, Department of Biology, University of Western Ontario Fall 2007
- Ornithology**, Department of Ecology and Evolutionary Biology, University of Arizona Spring 2007

#### TEACHING ASSISTANT AND LAB INSTRUCTOR:

- Department of Ecology and Evolutionary Biology, University of Arizona:
- Environmental Biology** (3<sup>rd</sup> year non-majors) Spring 2006
- Animal Behavior** (senior/grad level) Fall 2005
- Ornithology** (senior/grad level) Spring 2005
- Ecology** (core 3<sup>rd</sup> year level--TEACHING AWARD FOR THIS COURSE) Fall 2001

#### MENTORING, FIELD COURSES, OTHER TEACHING:

##### **Graduate advisor**

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

##### **External 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*

Allison Bays, Sarah Demadura, Keil Gary, Chyna Pei, Ian Waters 2013

Alex Henry, Chyna Pei, Willow Malone, Alexandra McChesney, Hunter Nedland, Dylan Smith, Amie Sommers, Blake Walters	2014
Caroline Doty, Jacqueline Gehrt, Justin Leon, Amanda Moraes Charpinel, Suzy Replogle, Breyana Ramsey, Dylan Smith, Amie Sommers, Chelsea Sink	2015
Michaela Gustafson, Suzy Replogle, Destiny Hett, Jessica Nguyen, Caitlin Weichman, Lauren Angermayer	2016
Michaela Gustafson, Natasha Bergevine, Cole Allen, Logan Thomas Katelyn Thompson, Mary Kate Wilcox	2017
Mary Kate Wilcox, Dylan Smith, Natasha Bergevine, Logan Thomas, Joanna Gresham, Blair Pfeifer, Hannah Choo	2018
Joanna Gresham, Miriam Reynaldo, Austin Roe, Ryan Donnelly, Muriel Winnerman	2019
<i>K-State Developing scholars program</i>	
Breyana Ramsey (2014–15)	
<i>K-State REU program</i>	
Steffanie Munguia (U. South Florida; 2013), Yisel Márquez (Weber State University; 2015), Sarah Winnicki (Dennison U., 2014 & 2015), Braiam Rosado (Universidad de Turabo, 2017), Edwin Harris (Beloit College, 2017), Darrien Savage (KSU, 2017), Dylan Smith (KSU, 2018)	
<i>K-State SCTE program</i>	
Justin Leon (2014), Emily Samuel (2016)	
<b>Post-doctoral mentoring program</b>	2012–2013
Co-organized bi-weekly meetings, KSU Division of Biology	
<b>Committee member</b>	
<i>K-State</i> —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)	
<i>U Arizona</i> —Carl Lundblad (2011–2014)	
<b>Research Experience for Undergraduates (REU) program, La Selva Biological Station, Costa Rica</b>	Summers 2007 & 2005
Two (of 3) mentored students published their research projects and are now pursuing academic careers in biology (1 is tenure-track faculty member)	
<b>Organization for Tropical Studies Tropical Biology</b>	2002, 2003, 2016
Week-long guest faculty member, OTS Tropical Biology graduate field courses, directed short graduate student field projects	
<b>Department of Ecology and Evolutionary Biology, U. Arizona</b>	2006
Directed undergraduate honors research thesis	
<b>Department of Ecology and Evolutionary Biology, University of Arizona and Department of Biology, University of Western Ontario</b>	2001–2009
Mentor to > 35 assistants from Costa Rica, Colombia, Spain, Australia, Canada and USA in the field	

<b>SERBO (Oaxaca) and IHNE (Chiapas)</b>	1999 &
Teaching assistant, tropical plant field courses, Dr. B.L. Boyle, instructor	1997
<b>Guest lecturer</b>	
Isotope Ecology, Kansas State University	2016
Population Biology, Kansas State University	2016
Nature of Biological Things (non-majors), Physiology of Migration (upper-level majors); University of Western Ontario, London ON	2009, 2010, & 2011
Animal Behavior, University of Guelph, Guelph ON	2007 & 2010
Environmental Biology, University of Arizona, Tucson AZ	2006
Animal Behavior, University of Arizona, Tucson AZ	2005

### **LEADERSHIP, SERVICE, AND INTERNATIONAL EXPERIENCE**

#### **Professional Societies:**

*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)

*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

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

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

*Co-organizer*, symposium “*Alpine 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)

#### **Reviewer:**

*Granting agencies and publishers*: National Science Foundation (panelist Jan 2014, panelist Oct 2016, ad-hoc reviewer [2 proposals]), Environmental Protection Agency (panelist Jan 2013), National Geographic Society (3 ad hoc reviews), Princeton University Press.

*Journals* (85 reviews): American Midland Naturalist (1), American Naturalist (2), Avian Conservation and Ecology (3), Animal Behavior (1), Behavioural Ecology (1), Behavioural Ecology & Sociobiology (1), Biological Conservation (2), Biological Journal of the Linnean Society (1), Biology Letters (2), Biotropica (2), Bird Conservation International (2), Bull. Kansas Ornithological Soc. (1), Canadian Journal of Forest Research (1), Canadian Journal of Zoology (1), Ecological Applications (1),

Ecology (3), Ecology Letters (2), Ecosphere (2), Ecosystems (1), Frontiers in Ecology and the Environment (1), Functional Ecology (2), Global Ecology and Biogeography (1), Journal of Animal Ecology (9), Journal of Avian Biology (2), Journal of Experimental Zoology (1), Journal of Field Ornithology (5), Journal of Ornithology (3), Journal of Tropical Ecology (3), Journal of Zoology (1), Oecologia (2), Oikos (2), PLoS One (2), Proceedings of the National Academy of Sciences (1), Proceedings of the Royal Society-B (2), Royal Society Open Science (2), The Auk: Ornithological Advances (5), The Condor: Ornithological Applications (1), Tropical Conservation Science (1), Wilson Journal of Ornithology (3), Zoological Studies (2)

**Departmental service:** Ecologists (2 positions) search committee (2018), Mammalian Biologist search committee (2017–2018), Graduate recruiting committee (2014–present), 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

**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**

“*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>

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 by dozens of online science news agencies including 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