# CURRICULUM VITAE DAVID N. BONTER

Cornell Lab of Ornithology 159 Sapsucker Woods Road Ithaca, New York 14850

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# EDUCATION:

**Ph.D.** 2003. School of Natural Resources, University of Vermont, Burlington, Vermont. Dissertation: The migration and ecology of landbirds during migration in the Great Lakes basin. **M.A.** 1996. University of Miami Graduate School of International Studies, Miami, Florida. Thesis: The international politics of nearctic-neotropical migratory avifauna conservation. **B.A.** 1994. University of Miami, Miami, Florida.

# EMPLOYMENT AND PROFESSIONAL EXPERIENCE:

**Co-Director, Center for Engagement in Science and Nature,** Cornell Lab of Ornithology, Cornell University, Ithaca, New York, 2019 – present.

**Arthur A. Allen Director of Citizen Science,** Cornell Lab of Ornithology, Cornell University, Ithaca, New York. 2016 – present.

**Senior Lecturer,** Cornell University, Ithaca, New York. 2013 – present.

**Senior Extension Associate**, Cornell University, Ithaca, New York. 2013 – present.

**Assistant Director, Citizen Science Program,** Cornell Lab of Ornithology, Cornell University, Ithaca, New York. 2009 – 2016.

Faculty, Shoals Marine Lab, Cornell University, Appledore Island, Maine. 2007 – 2016.

Extension Associate, Cornell University, Ithaca, New York. 2009 – 2013.

**Leader, Project FeederWatch, Cornell Lab of Ornithology, Ithaca, New York.** 2002 – 2013.

#### SERVICE:

**Faculty Fellow**, Cornell Atkinson Center for Sustainability, 2018 – present.

**Associate Editor**, *Journal of Field Ornithology*. 2012 – 2021.

**National Science Foundation.** Panelist. Dynamics of Integrated Socio-Environmental Systems 2024. Dynamics of Integrated Socio-Environmental Systems 2023. Coupled Natural Human Systems 2019.

**UK-US Collaboration for Digital Scholarship in Cultural Institutions.** Workshop sponsored by National Science Foundation. Panelist. 2019.

Cornell University Institutional Animal Care and Use Committee. Member, 2015 – 2019.

Editorial Board, PLoS ONE. 2014 – 2018.

American Ornithological Society. Elected Councilor. 2013 – 2016.

House Fellow, Alice Cook House, Cornell University. 2015 – 2016.

**National Ecological Observatory Network (NEON)**. Advisor, Citizen Science program, 2013. Design Consortium Member, Informal Science Education committee. Los Angeles, CA, January 2005; Boston, MA, March 2005; Estes Park, CO, June 2005.

**Ornithological Societies of North America**. Chair and Treasurer. 2013 – 2014.

**Association of Field Ornithologists**. Past-President, 2010 – 2011; President, 2008 – 2010; Vice-president, 2007 – 2008; Councilor & Webmaster, 2005 – 2008.

The Nature Conservancy, Central & Western NY Chapter. Scientific Advisory Board, Songbird Stopover Ecology project. 2010 – 2012.

**Federal Advisory Committee Member**. USGS Bird Banding Laboratory. 2005 – 2006.

National Phenology Network. Workshop participant, Milwaukee, WI, 2008.

**Braddock Bay Bird Observatory**. Board member, 1997 – present; Director of Research, 1997 – 2012; Vice President, 2004 – 2010; President, 2001 – 2004.

# PEER-REVIEWED PUBLICATIONS:

# \* Indicates undergraduate student collaborator.

Watkins, L., D.N. Bonter, P.J. Sullivan, M.T Walter. In prep. The utility of trash trap data for advancing river plastic pollution research. *Environmental Sciences: Advances*.

- 57. Watkins, L., D.N. Bonter, P.J. Sullivan, M.T Walter. In press. Methods for monitoring urban street litter: A comparison of municipal audits and an app-based citizen science approach. *Environmental Science: Advances*.
- 56. Bailey, R.L., L. Larson, D.N. Bonter. 2023. NestWatch: an open-access, long-term dataset on avian reproductive success. *Ecology*, e2430. <a href="https://doi.org/10.1002/ecy.4230">https://doi.org/10.1002/ecy.4230</a>
- 55. Dayer, A.A., R.J. Hall, D.M. Hawley, P.C. Pototsky, T.B. Phillips, D.N. Bonter, A.M. Dietsch, E.I. Greig, W.M. Hochachka. 2023. Birds are not the only ones impacted by guidance to ease bird feeding. *People and Nature*. <a href="https://doi.org/10.1002/pan3.10566">https://doi.org/10.1002/pan3.10566</a>
- 54. Bonter, D.N., V.Y. Martin, E.I. Greig, T.B. Phillips. 2023. Participant retention in a continental-scale citizen science project increases with the diversity of species detected. *BioScience*, 73:433-440. https://doi.org/10.1093/biosci/biad041
- 53. Mady, R.P., T.B. Phillips, D.N. Bonter, C. Quimby, J. Borland, C. Eldermire, B.T. Walters, S.A. Parry, M. Chu. 2023. Engagement in the data collection phase of the scientific process is key for enhancing learning gains. *Citizen Science: Theory and Practice*, 8:14. <a href="https://doi.org/10.5334/cstp.594">https://doi.org/10.5334/cstp.594</a>
- 52. Phillips, T., N. Wells, A. Brown\*, J. Tralins\*, D.N. Bonter. 2023. Nature and well-being: The association of nature engagement and well-being during the SARS-CoV-2 pandemic. *People and Nature*. <a href="https://doi.org/10.1002/pan3.10433">https://doi.org/10.1002/pan3.10433</a>
- 51. Miller. E.T., O.M. Aodha, E.I. Greig, D.N. Bonter, W.M. Hochachka. 2022. Congeneric predators fill discrete niches created by the relative abundances of their prey species. *Journal of Avian Biology*:

- 50. Schmalfuss, A.B. Jr.\* D.N. Bonter. 2022. Response of Red-tailed Hawks (*Buteo jamaicensis*) and Turkey Vultures (*Cathartes aura*) to an unintentionally provided, superabundant prey resource. *Journal of Raptor Research* 56:313-322. <a href="https://doi.org/10.3356/JRR-21-134">https://doi.org/10.3356/JRR-21-134</a>
- 49. Hagler, S.J.,\* A. Gibbons, J.C. Bednarz, W.S. Clark, D.N. Bonter. 2022. Nest provisioning and sociality at Harris's Hawk nests in South Texas. *Journal of Raptor Research* 56:161-170. https://doi.org/10.3356/JRR-21-39
- 48. Bailey, R.L. D.N. Bonter. 2021. Supplemental feeding alters lay date and nest survival in Eastern Bluebirds but not in chickadees at large spatial scales. *Ornithological Applications*. 124:1-11. https://doi.org/10.1093/ornithapp/duab046
- 47. Hughes, E.\*, R.P. Mady, D.N. Bonter. 2021. Evaluating the accuracy and biological meaning of visits to RFID-enabled bird feeders using video. *Ecology & Evolution* 11:17132–17141. https://doi.org/10.1002/ece3.8352
- 46. Sayers, C.J.\*, M.R. Roeder, L. Forrette, D. Roche, G.L.B. Dupont, S.E. Apgar, A.R. Kocek, A.M. Cook, W.G. Shriver, C.S. Elphick, B. Olsen, D.N. Bonter. 2021. Geographic variation of mercury in breeding tidal marsh sparrows of the northeastern United States. *Ecotoxicology* <a href="https://doi.org/10.1007/s10646-021-02461-y">https://doi.org/10.1007/s10646-021-02461-y</a>
- 45. Dzielski, S.A.\*, R.L. Bailey, F. Fernandez-Duque\*, D.N. Bonter. 2021. Supplemental feeding of insect larvae increases mass of nestling Eastern Bluebirds, but not nestling Black-capped Chickadees. *Journal of Field Ornithology* 92:294-303. <a href="https://doi.org/10.1111/jofo.12376">https://doi.org/10.1111/jofo.12376</a>
- 44. Bonter, D.N. E.I. Greig. 2021. Over 30 years of standardized bird counts at supplementary feeding stations in North America: A citizen science data report for Project FeederWatch. *Frontiers in Ecology and Evolution* 9: Article 619682 <a href="https://doi.org/10.3389/fevo.2021.619682">doi.org/10.3389/fevo.2021.619682</a>
- 43. Mady, R.P., W.M. Hochachka, D.N. Bonter. 2021. Consistency in supplemental food availability affects the space use of wintering birds. *Behavioral Ecology*. <a href="https://doi.org/10.1093/beheco/arab002">https://doi.org/10.1093/beheco/arab002</a>
- 42. Phillips, T.B., R.L. Bailey, V.M. Martin, H. Faulkner-Grant, D.N. Bonter. 2021. The role of citizen science in management of invasive avian species: What people think, know, and do. *Journal of Environmental Management* 280:111709. doi: 10.1016/j.jenvman.2020.111709
- 41. Berigan, L.A.\*, E.I. Grieg, D.N. Bonter. 2020. Urban House Sparrow populations decline in North America. *Wilson Journal of Ornithology* 132: 248-258. https://doi.org/10.1676/1559-4491-132.2.248
- 40. Bailey, R., H. Faulkner, V.M. Martin, C. Phillips, D.N. Bonter. 2020. Nest Usurpation by non-native birds and the role of people in nest box management. *Conservation Science and Practice* 2:e185. https://doi.org/10.1111/csp2.185
- 39. Fernandez-Duque, F.\*, R. Bailey, D.N. Bonter. 2019. Egg oiling as an effective management technique for limiting reproduction in an invasive passerine. Avian Conservation and Ecology 14:20. <a href="https://doi.org/10.5751/ACE-01491-140220">https://doi.org/10.5751/ACE-01491-140220</a>
- 38. Dayer, A., C. Rosenblatt, D.N. Bonter, H. Faulkner, R. Hall, W.M. Hochachka, C. Phillips, D. Hawley. 2019. Observations at backyard bird feeders influence the emotions and actions of people that feed birds. *People and Nature* 1:138-151. DOI: 10.1002/pan3.17
- 37. McCabe, J.D., H. Yin, J. Cruz, V. Radeloff, A. Pidgeon, D.N. Bonter, B. Zuckerberg. 2018. Prey abundance and urbanization influence the establishment of avian predators in a metropolitan landscape.

- 36. Rosenblatt, C.R.\*, D.N. Bonter. 2018. Characteristics of fields used by wintering birds in New York. *Wilson Journal of Ornithology* 130:924-931.
- 35. Reed, J.H.\*, D.N. Bonter. 2018. Supplementing non-target taxa: Bird feeding alters the local distribution and abundance of mammals. *Ecological Applications* 28: 761-770. https://doi.org/10.1002/eap.1683
- 34. Witynski, M.L.\*, D.N. Bonter. 2018. Crosswise migration by Yellow Warblers, Nearctic-Neotropical passerine migrants. *Journal of Field Ornithology* 89: 37-46. doi: 10.1111/jofo.12237 **Winner of the journal's "Best Student Paper" Award in 2018.**
- 33. Miller, E., D.N. Bonter, C. Eldermire, B. Freeman, E. Greig, L. Harmon, C. Lisle, W. Hochachka. 2017. Fighting over food unites the birds of North America in a continental dominance hierarchy. *Behavioral Ecology* 28:1454-1463. doi:10.1093/beheco/arx108
- 32. Bailey, R.L., D.N. Bonter. 2017. Predator guards on nest boxes improve reproductive success of birds. *Wildlife Society Bulletin* 41:434-441. doi:10.1002/wsb.801
- 31. Greig, E.I., E.M. Wood, D.N. Bonter. 2017. Winter range expansion of a hummingbird is associated with urbanization and supplemental feeding. *Proceedings of the Royal Society B*. 284:20170256.
- 30. Heaton Crisologo, T.L.\*, D.N. Bonter. 2017. Defending the weak: parental defense peaks when chick vulnerability is greatest in the herring gull (*Larus argentatus*). *Ethology* 123:113-122. <a href="https://doi.org/10.1111/eth.12578">https://doi.org/10.1111/eth.12578</a>
- 29. Perlut, N.G., D.N. Bonter, J.C. Ellis, M.S. Friar. 2016. Rooftop nesting in a declining population of herring gulls (*Larus argentatus*) in Portland, Maine. *Waterbirds* 39:68-74. <a href="https://doi.org/10.1675/063.039.sp113">https://doi.org/10.1675/063.039.sp113</a>
- 28. Bonter, D.N., M.C. Moglia\*, L.E. DeFisher\*. 2016. Sons do not take advantage of a head start: Parity in offspring sex ratios despite greater initial investment in males. *Journal of Avian Biology* 47:121-128. <a href="https://doi.org/10.1111/jav.00649">https://doi.org/10.1111/jav.00649</a>
- 27. Shah, S.S.\*, S.A. MacLean\*, E.I. Greig, D.N. Bonter. 2015. Risk-based alarm calling in a non-passerine bird. *Animal Behaviour* 106:129-136. <a href="https://doi.org/10.1016/j.anbehav.2015.05.011">https://doi.org/10.1016/j.anbehav.2015.05.011</a>
- 26. Zuckerberg, B., E.J. Ross, K. Prince, D.N. Bonter. 2015. Climate variability on wintering grounds drives spring arrival of short-distance migrants to the Upper Midwestern United States. *Studies in Avian Biology* 47:83-94.
- 25. Bonter, D.N., S.A. MacLean\*, S.S. Shah\*, M.C. Moglia\*. 2014. Storm induced shifts in optimal nesting sites: A potential effect of climate change. *Journal of Ornithology* 155:632-638. https://doi.org/10.1007/s10336-014-1045-9
- 24. MacLean, S.A.\*, D.N. Bonter. 2013. The sound of danger: threat sensitivity to predator vocalizations, alarm calls, and novelty in gulls. *PLoS ONE*. 8(12):e82384 DOI: 10.1371/journal.pone.0082384.
- 23. Bonter, D.N., B. Zuckerberg, C.W. Sedgwick\*, W.M. Hochachka. 2013. Daily foraging patterns in free living birds: Exploring the predation-starvation tradeoff. *Proceedings of the Royal Society B*. 280:20123087. <a href="https://doi.org/10.1098/rspb.2012.3087">https://doi.org/10.1098/rspb.2012.3087</a>
- 22. DeFisher, L.E.\*, D.N. Bonter. 2013. Effects of invasive European fire ants (*Myrmica rubra*) on herring gull (*Larus argentatus*) reproduction. *PLoS ONE* 8: e64185.

#### https://doi.org/10.1371/journal.pone.0064185

- 21. Koenig, W.D., A.M. Liebhold, D.N. Bonter, W.M. Hochachka, J.L. Dickinson. 2013. Effects of the emerald ash borer invasion on four species of birds. *Biological Invasions* 15: 2095-2103. <a href="https://doi.org/10.1007/s10530-013-0435-x">https://doi.org/10.1007/s10530-013-0435-x</a>
- 20. Bonter, D.N., C.B. Cooper. 2012. Data validation in citizen science: A case study from Project FeederWatch. *Frontiers in Ecology and the Environment* 10:305-307. https://doi.org/10.1890/110273
- 19. Dickinson, J.L., J. Shirk, D. Bonter, R. Bonney, R.L. Crain, J. Martin, T. Phillips, K. Purcell. 2012. The current state of citizen science as a tool for ecological research and public engagement. *Frontiers in Ecology and the Environment* 10: 291-297. <a href="https://doi.org/10.1890/110236">https://doi.org/10.1890/110236</a>
- 18. Bonter, D.N. 2012. From backyard observations to continent-wide trends: Lessons from the first 22 years of Project FeederWatch. *In* Citizen Science: Public participation in environmental research. J.L Dickinson and R. Bonney (Eds). Cornell University Press, Ithaca, NY.
- 17. Savoca, M.S.\*, D.N. Bonter, B. Zuckerberg, J.L. Dickinson, J.C. Ellis. 2011. Nesting density is an important factor affecting chick growth and survival in the herring gull. *Condor* 113:565-571. <a href="https://doi.org/10.1525/cond.2011.100192">https://doi.org/10.1525/cond.2011.100192</a>
- 16. Zuckerberg, B., D.N. Bonter, W.M. Hochachka, W.D Koenig, A.T. DeGaetano, J.L. Dickinson. 2011. Climatic constraints on wintering bird distributions are modified by urbanization and weather. *Journal of Animal Ecology* 80:403-413. <a href="https://doi.org/10.1111/j.1365-2656.2010.01780.x">https://doi.org/10.1111/j.1365-2656.2010.01780.x</a>
- 15. Bonter, D.N., E.S. Bridge. 2011. Applications of radio frequency identification (RFID) in ornithological research: a review. *Journal of Field Ornithology* 82:1-10. <a href="https://doi.org/10.1111/j.1557-9263.2010.00302.x">https://doi.org/10.1111/j.1557-9263.2010.00302.x</a>
- 14. Bridge, E.S., D.N. Bonter. 2011. A low-cost radio frequency identification device for ornithological research. *Journal of Field Ornithology* 82:52-59. <a href="https://doi.org/10.1111/j.1557-9263.2010.00307.x">https://doi.org/10.1111/j.1557-9263.2010.00307.x</a>
- 13. Bonter, D.N., B. Zuckerberg, J.L. Dickinson. 2010. Invasive birds in a novel landscape: habitat associations and effects on established species. *Ecography* 33:494-502. <a href="https://doi.org/10.1111/j.1600-0587.2009.06017.x">https://doi.org/10.1111/j.1600-0587.2009.06017.x</a>
- 12. Dickinson, J.L., B. Zuckerberg, D.N. Bonter. 2010. Citizen science as an ecological research tool: Challenges and benefits. *Annual Review of Ecology, Evolution, and Systematics* 41:149-172. <a href="https://doi.org/10.1146/annurev-ecolsys-102209-144636">https://doi.org/10.1146/annurev-ecolsys-102209-144636</a>
- 11. Brooks, E.W., D.N. Bonter. 2010. Long-term changes in avian community structure in a successional, forested, and managed plot in a reforesting landscape. *Wilson Journal of Ornithology* 122:288-295. https://doi.org/10.1676/09-058.1
- 10. Bonter, D.N., S.A. Gauthreaux, Jr., T.M. Donovan. 2009. Characteristics of important stopover locations for migrating birds: Remote sensing with radar in the Great Lakes basin. *Conservation Biology* 23:440-448. https://doi.org/10.1111/j.1523-1739.2008.01085.x
- 9. Bonter, D.N., W.M. Hochachka. 2009. A Citizen Science Approach to Ornithological Research: Twenty Years of Watching Backyard Birds. Proceedings of the Fourth International Partners In Flight Conference, McAllen, Texas, pp. 453-458. <a href="https://www.researchgate.net/publication/239592738">https://www.researchgate.net/publication/239592738</a> A citizen science approach to ornithological research\_twenty\_years\_of\_watching\_backyard\_birds
- 8. Bonter, D.N., E.W. Brooks, T.M. Donovan. 2008. What are we missing with ground-level mist nets?

Using elevated nets at a migration stopover site. *Journal of Field Ornithology* 79:314-320. https://doi.org/10.1111/j.1557-9263.2008.00179.x

- 7. Cooper, C., D.N. Bonter. 2008. Artificial nest site preferences of Black-capped Chickadees. *Journal of Field Ornithology* 79:193-197. https://doi.org/10.1111/j.1557-9263.2008.00162.x
- 6. Bonter, D.N., M.G. Harvey\*. 2008. Winter Survey Data Reveal Range-wide Decline in Evening Grosbeak Populations. *Condor* 110:376-381. https://doi.org/10.1525/cond.2008.8463
- 5. Haseltine, S.D., P.R. Schmidt, B.D. Bales, D.N. Bonter, et al. 2008. Report of the Federal Advisory Committee on the Bird Banding Laboratory: US Geological Survey Circular 1320, 19p.
- 4. Bonter, D.N., T.M. Donovan, E.W. Brooks. 2007. Daily mass changes in landbirds during migration stopover on the south shore of Lake Ontario. *Auk* 124:122-133. <a href="https://doi.org/10.1093/auk/124.1.122">https://doi.org/10.1093/auk/124.1.122</a>
- 3. Harvey, M.G.\*, D.N. Bonter, L.M. Stenzler, I.J. Lovette. 2006. A comparison of plucked feathers versus blood samples as DNA sources for molecular sexing. *Journal of Field Ornithology* 77:136-140. https://doi.org/10.1111/j.1557-9263.2006.00033.x
- 2. Bonter, D., W. Hochachka. 2003. Widespread declines of chickadees and Corvids: possible impact of West Nile virus. *American Birds*. <a href="https://www.researchgate.net/publication/285738914">https://www.researchgate.net/publication/285738914</a> Declines of chickadees and corvids Possible impacts\_of\_West\_Nile\_virus
- 1. Donovan, T., C. Beardmore, D. Bonter, J. Brawn, R. Cooper, R. Ford, J. Fitzgerald, S. Gauthreaux, T. George, W. Hunter, T. Martin, J. Price, K. Rosenberg, P. Vickery, T. Wigley. 2002. Priority research needs for the conservation of Neotropical migrant landbirds. *Journal of Field Ornithology* 73: 329-339. <a href="https://doi.org/10.1648/0273-8570-73.4.329">https://doi.org/10.1648/0273-8570-73.4.329</a>

# OTHER PUBLICATIONS:

Bonter, D. 2003. The migration and ecology of landbirds during migration in the Great Lakes basin. Ph.D. Dissertation, University of Vermont.

Bonter, D., T. Donovan. 2002. Habitat Selection. In T. Donovan and C. Weldon, <u>Spreadsheet Exercises in Ecology and Evolution</u>, Sinauer Press, Sunderland, Massachusetts, p. 321-330.

Bonter, D., T. Donovan. 2002. Optimal Foraging Models. In T. Donovan and C. Weldon, <u>Spreadsheet Exercises in Ecology and Evolution</u>, Sinauer Press, Sunderland, Massachusetts, p. 331-340.

Bonter, D., T. Donovan. 2002. Key Factor Analysis. In T. Donovan and C. Weldon, <u>Spreadsheet Exercises in Ecology and Evolution</u>, Sinauer Press, Sunderland, Massachusetts, p. 241-252.

Multiple volumes of *Focus on Citizen Science: Winter Bird Highlights*.

#### PUBLICLY-AVAILABLE DATA SETS:

Bailey, R., L. Larson, D.N. Bonter. 2023. NestWatch Open Dataset, Mendeley Data, V1, doi: 10.17632/wjf794z7gc.1

Bonter, D., V. Martin, E. Greig, T. Phillips. 2023. Participant retention in a continental-scale citizen science project increases with the diversity of species detected, Mendeley Data, V1, doi: 10.17632/87h4hxp33r.1

Bonter, D.N. 2022. Supplemental feeding of insect larvae increases mass of nestling Eastern Bluebirds but not nestling Black-capped Chickadees, Mendeley Data, V4, doi: 10.17632/x8nv4tktzt.4

Bonter, D.N., E.I. Greig. 2022. Project FeederWatch Raw Data, Mendeley Data, V2, doi: 10.17632/cptx336tt5.2

Mady, R. P., Mason, P., Strimas-Mackey, M., Chu, M., Phillips, T., Bonter, D., Eldermire, C., Walters, B. 2021. Bird Cams Lab Biological Data, Cornell Library eCommons Repository, doi:10.7298/fxqt-zw38

# TEACHING & MENTORING:

#### **Senior thesis students:**

Student	Year	Thesis Title	Published
Matthew Savoca	2010	"Nesting density is an important factor affecting chick growth and survival in the herring gull"	Condor
Sarah MacLean	2013	"The sound of danger: Threat sensitivity to predator vocalizations, alarm calls and novelty in herring gulls"	PLoS One
Luke DeFisher	2013	"Effects of invasive European fire ants ( <i>Myrmica rubra</i> ) on herring gull ( <i>Larus argentatus</i> ) reproduction"	PLoS One
Shailee Shah	2014	"Risk-based alarm calling in a non- passerine bird"	Animal Behaviour
Michelle Moglia	2014	"Variability in egg coloration: Is it adaptive or are females just running out of ink?"	
Taylor Heaton Crisologo	2016	"Defending the weak: Parental defense peaks when chick vulnerability is at its greatest in the herring gull ( <i>Larus argentatus</i> )"	Ethology
J Hunter Reed	2016	"Supplementing non-target taxa: Bird feeding alters the local distribution of mammals"	Ecological Applications
Emily Shertzer	2016	"Weather and foraging behavior in free- living birds"	
Natasha Bartolotta	2016	"The bold and the fearful: Personality and auditory neophobia are independent in herring gulls ( <i>Larus argentatus</i> )"	

Max Witynski	2017	"Crosswise migration in a Nearctic- Neotropical passerine migrant, the yellow warbler ( <i>Setophaga petechia</i> )"	Journal of Field Ornithology
Liam Berigan	2017	"Citizen science provides insights into the decline of House Sparrows in North America"	Wilson Journal of Ornithology
Connor Rosenblatt	2017	"Characteristics of fields used by birds in winter in New York"	Wilson Journal of Ornithology
Odile Maurelli	2017	"Sex- and age-based latitudinal segregation in the wintering distribution of herring gulls ( <i>Larus argentatus</i> )"	
Robert (Alex) Weibe	2019	"Integrating machine learning and citizen science data to generate high-performing species distribution models for a threatened bird species, the Gray Tinamou ( <i>Tinamus tao</i> )"	
Gaetan (Gates)Dupont	2019	"Recent avian population dynamics in the Northeastern United States -suggest persistent but diminished impacts of West Nile virus"	
Sarah Toner	2019	"Development, not bird feeders, is associated with increased occupancy of range-expanding species in northern Michigan"	
Andrew Schmalfuss	2020	"Response of Red-tailed Hawks ( <i>Buteo jamaicensis</i> ) and Turkey Vultures ( <i>Cathartes aura</i> ) to an unintentionally provided, superabundant prey resource"	Journal of Raptor Research
Samantha Hagler	2020	"Nest provisioning and the role of auxiliaries at Harris's Hawk nests in south Texas"	Journal of Raptor Research
Christopher Sayers	2020	"Geographic variation of total mercury concentration in breeding tidal marsh sparrows of the northeastern United States"	Ecotoxicology
Yuting Deng	2020	"Comparing estimates of songbird relative abundance detected using autonomous acoustic recordings and mist-net captures from a migration stopover site"	

Eve Hallock	2020	"Cavity reuse in the Acorn Woodpecker (Melanerpes formicivorus)"	
Eric Hughes	2021	"Evaluating the accuracy and biological meaning of visits to RFID-enabled bird feeders using video"	Ecology & Evolution
Marie Chappell	2021	"Two Analyses of Geographic Variation in Yellow-breasted Chat ( <i>Icteria virens</i> ) Songs"	
William Rhet Taber IV	2022	"Conservative maternal dosing of the neonicotinoid insecticide Imidacloprid reduces nestling growth in free-living House Sparrows ( <i>Passer domesticus</i> )"	
Qwahn Kent	2022	"An exploration of factors influencing bird communities in the Northwestern Himalayas"	
Alyssa Nowicki	2023	"Habitat correlates of reproductive success in American Kestrel across the US and Canada"	

#### **Courses:**

**Field Methods in Avian Ecology** (NTRES 2400, 3 credits). Cornell University Department of Natural Resources, 2017 – present. Field- & classroom-based course focused on methods for assessing populations, studying, and tracking wild birds.

**Ivy Expedition**. Cornell Lab of Ornithology. Led donor-funded field expedition in ornithology to, "provide intellectual and field experiences at state-of-the-art levels and train a new generation." Laikipia Plateau, Kenya. 2018, 2019.

**Field Methods in Bird Banding** (NTRES 2300, 3 credits). Cornell University Department of Natural Resources, 2012 – 2016. Field- & classroom-based course focused on methods for capturing, identifying, banding, and studying wild birds.

**Field Ornithology** (BIOSM 3740, 3 credits). Cornell University Shoals Marine Lab, Appledore Island, 2007 – 2016. A 2-week intensive field course surveying methods for ornithological research.

**Research Internships in Field Science**. Shoals Marine Lab, 2008 – 2016. Mentor 1-3 students conducting intensive field research projects each summer. Projects generally lead to senior honors theses and publications.

Tropical Field Ornithology (BIOEE 2640, 3 credits). Dominican Republic, 2015. Co-instructor.

Graduate Seminar in Ornithology (BIOEE 7800). Co-leader, Fall 2014.

**Tropical Field Ecology and Behavior** (BIOEE 2650). Kenya, Africa, 2013 & 2014. Co-instructor for an intensive 4 credit Cornell intersession course at Mpala Field Station in central Kenya.

**Explorations in the Biological Sciences**. Cornell University, Spring and Fall semesters, 2005 – 2010. Taught labs demonstrating bird banding as a tool for biological research.

**Field Methods in Ornithology**. Cornell University, Summer 2006. Co-taught a 5-credit, 8-week course surveying a wide range of methods employed in ornithological research.

**Environmental Problem Analysis**. University of Vermont, School of Natural Resources. January 2002 – May 2002. Sophomore-level undergraduate course integrating ecological and social aspects of environmental problems.

**Computing Applications**. State University of New York College of Environmental Science and Forestry. January 1998 – May 1999. Served as primary instructor for course, including classroom lectures and computer laboratory instruction sessions. Managed undergraduate teaching assistants.

**Sampling Methods**. State University of New York College of Environmental Science and Forestry, Cranberry Lake Biological Station. July 2000. Co-taught one-week field biology course examining biological sampling and inventory methodologies.

**Guest Lectures**, Cornell Courses: Biological Oceanography and Ocean Biogeochemistry (2014); Marine Biogeochemistry (2013); Marine Biology (2011, 2012); Seals, Sharks and Cetaceans (2011); Biology Seminar (Ornithology, 2010-2012)

## FUNDING:

- "Using continent-wide participatory science to model the dynamic outcomes for humans and birds in a socio-environmental system." National Science Foundation, Dynamics of Integrated Socio-Environmental Systems. 2023-2026. \$1,599,997. (Co-PI).
- "Nature and Well-Being: The role of birding and nature engagement during COVID-19." Cornell Atkinson Center for Sustainability. 2020-2021. \$10,000. (Co-PI).
- "Developing the processes and potential to engage historically underrepresented communities in public participation in STEM research through authentic and impactful collaboration." National Science Foundation, 2018-2021. \$2,537,135 (Co-PI status transferred to community partners post-award).
- "Co-created science and discovery with live bird cams: Designing an online collaborative system for community learning." National Science Foundation, 2017-2019. \$1,686,503 (Co-PI).
- "Re-wilding urban environments: Integrating remote sensing and citizen science to study the environmental context and ecological consequences of returning avian predators." NASA ROSES, 2017. Pilot phase. (Co-PI, collaboration with U. Wisconsin).
- "Cornell undergraduates engaging with citizen scientists: Thinking outside of the (nest)box for biological research and science communication." Engaged Cornell, 2016. \$25,000 (PI).
- "Building STEM engagement focused on homes for nesting birds." Sustainable Forestry Initiative Conservation and Community Partnership Grant, 2016-2018. \$26,200 (PI).
- "Thinking outside of the (nest) box: STEM engagement focused on nesting birds.; Smith-Lever Federal Formula Funds, 2015-2017. \$75,000 (PI).

# CONFERENCE PRESENTATIONS (PRESENTER/FIRST AUTHOR ONLY):

Citizen Science Association, Raleigh, North Carolina, March 2019. "Situational factors related to participant retention in a continental-scale citizen science project."

Cornell Cooperative Extension: Agriculture, Food & Environmental Systems, Ithaca, New York,

November 2018. "Successful engagement of the public in scientific research: Experiences from the Cornell Lab of Ornithology." [Invited contribution]

Eastern Bird Banding Association, Ithaca, New York, March 2017. "Banding + Inquisitive Undergrads = Quality Science." [Keynote address]

American Ornithologists' Union / Cooper Ornithological Society. Norman, Oklahoma, August 2015. "Sons do not take advantage of a head start: Parity in Herring Gull offspring sex ratios despite greater initial investment in males."

American Ornithologists' Union / Cooper Ornithological Society. Estes Park, Colorado, September 2014. "Winter range expansion in Anna's Hummingbird: The interplay of climate, habitat and supplemental feeding."

American Ornithologists' Union. Chicago, Illinois, August 2013. "Temporal shifts in optimal nesting sites due to storms: A potential effect of climate change."

Integrated Digitized Biocollections (iDigBio) Public Participation in Digitization of Biodiversity Specimens Workshop, Gainesville, Florida, September 2012. "Lessons learned from 50 years of citizen science at Cornell." [Invited presentation]

North American Ornithological Conference. Vancouver, British Columbia, August 2012. "Cache economy: Inter-annual variability in reliance on supplemental food revealed by 'smart' feeders."

Public Participation in Scientific Research Workshop 2012 (Ecological Society of America). Portland, Oregon, August 2012. "Data validation in citizen science: A case study from Project FeederWatch." [Poster presentation]

ASTC Workshop on Integrating Citizen Science into Science Center Programming, Denver, Colorado, June 2012. "Project FeederWatch: The logistics of large-scale citizen science." [Invited Presentation]

Ohio Natural History Conference, Columbus, Ohio, February 2012. "Citizen Science: Engaging the public, learning about the natural world." [Keynote Address]

Association of Field Ornithologists/Cooper Ornithological Society/Wilson Ornithological Society, Kearney, Nebraska, March 2011. "Daily feeding patterns in winter: Predation may not be driving behavior."

Association of Field Ornithologists, Ogden, Utah, August 2010. "Studying supplemental feeding behavior with radio frequency identification."

American Ornithologists' Union, Philadelphia, Pennsylvania, August 2009. "Invasive birds in a novel landscape: habitat associations and effects on established species."

Ecological Society of America, Milwaukee, Wisconsin, August 2008. "Swimming in a sea of data: Validating large data sets collected by citizen scientists."

Association of Field Ornithologists / Wilson Ornithological Society, Mobile, Alabama, April 2008. "Eurasian Collared-Doves in North America: Colonization dynamics and implications for native doves."

MIGRATE 2008, Ithaca, New York, April 2008. "Citizen science and migration."

Association of Field Ornithologists, Orono, Maine, July 2007. "Long-term monitoring through Project FeederWatch: The case of the disappearing Evening Grosbeaks." [Invited symposium presentation]

North American Ornithological Conference, Veracruz, Mexico, October 2006. "Climate change and range shifts in a resident bird: Case study of the Carolina Wren."

The Wildlife Society, Boise, Idaho, March 2006. "The challenges and opportunities of citizen science: The Cornell experience."

Eastern Bird Banding Association, Rochester, New York, April 2005. "Bird studies across borders: Thinking big in ornithology." [Keynote Address]

American Ornithologists' Union, Quebec, Canada, August 2004. "Survival in resident birds: Is winter the limiting season?"

Association of Field Ornithologists / Wilson Ornithological Society, Ithaca, New York, April 2004. "Are elevated mist nets required to adequately sample the avian community at a migration stopover site?"

Association of Field Ornithologists / Wilson Ornithological Society, Ithaca, New York, April 2004. "Overwinter survival in resident birds using feeding stations in central New York." [Poster]

American Ornithologists' Union, Champaign, Illinois, August 2003. "The influence of landscape on the composition of winter bird communities in New York."

The Wildlife Society – New York, Utica, New York, February 2003. "Project FeederWatch: What can we learn from watching backyard bird feeders?"

North American Ornithological Conference, New Orleans, Louisiana, September 2002. "Divergent migration directions in the Great Lakes basin: The result of atmospheric circulation?"

American Ornithologists' Union, Seattle, Washington, August 2001. "Competition and temporal variability influence migration stopover site quality."

Vermont Cooperative Fish & Wildlife Research Unit, Burlington, Vermont, 2001. "Ecology of landbirds during migration."

American Ornithologists' Union, St. John's, Newfoundland, Canada, August 2000. "Migration stopover concentration areas in the northeastern United States: Remote sensing with WSR-88D (NEXRAD) radar."

Partners in Flight, Northeast Working Group, Middle Creek Wildlife Management Area, Pennsylvania, April 2000. "Using NEXRAD to identify migration stopover concentration areas in the northeastern United States."

Great Lakes Research Consortium Conference, Syracuse, New York, March 2000. "Nearshore habitat priorities for migratory passerines."

Eastern Bird Banding Association, Rochester, New York, April 1999. "Migration monitoring at Braddock Bay: The 1990s and beyond."

Great Lakes Research Consortium Conference, Syracuse, New York, January 1999. "Assigning conservation priorities to coastal habitats used by migrating songbirds."

#### **INVITED PUBLIC PRESENTATIONS:**

Hudson River Audubon Society, New York, May 2023. "Public engagement in science: For birds, people, and conservation."

Cornell Lab of Ornithology, Ithaca, New York, February 2017. "Of islands and undergrads: A decade of

bird study in the Isles of Shoals."

Broome County Naturalist Society, Vestal, New York, March 2014. "Cache economy: Optimal foraging in birds."

Montezuma Audubon Center, Savannah, New York, December 2012. "Large-scale citizen science and small-scale transmitters for studying birds."

Buffalo Museum of Science, 2012 Vaughan Lecture, Buffalo, New York, November 2012. "Science at the bird feeder: Engaging the public and employing novel technologies for understanding bird populations."

Wild Birds Unlimited Corporate Convention, Savannah, Georgia, June 2012. "Science at the bird feeder"

Connie Wilkins Bird Lecture, State University of New York College at Cortland, Cortland, New York, April 2012. "Science in the backyard."

Rochester Museum and Science Center, Rochester, New York, February 2011. "Birds, people, and science. Engaging the public to understand the natural world."

Martin Viette, Long Island, New York, February 2007. "Brighten the winter landscape by attracting birds to your yard."

International Migratory Bird Day, Greece, New York. April 2006. "The wonders of songbird migration."

"Light In Winter" Festival, Ithaca, New York, January 2005. "Attracting birds to your yard."

Bedford Audubon Society, Bedford, New York, November 2004. "The Cornell Lab of Ornithology and Project FeederWatch."

New York State Ornithological Association, September 2004. "The influence of landscape on the composition of winter bird communities in New York."

Allen's Creek Garden Club, Rochester, New York, April 2004. "Monitoring songbird migration at Braddock Bay."

Wild Bird Centers of America, Inc., Annual Meeting, Atlanta, Georgia, January 2004. "The Cornell Lab of Ornithology and Project FeederWatch."

Sunshine Rotary Club, Ithaca, New York, November 2003. "Project FeederWatch and Citizen Science."

Rochester Birding Association, Rochester, New York, November 2003. "Citizen-science at the Cornell Lab of Ornithology."

New York Cooperative Extension, Tompkins County, New York, November 2003. "Feeding birds: What to do, what not to do, and how to contribute to science."

Rhode Island Audubon, Block Island, Rhode Island, October 2003. "The wonders of songbird migration: radar and field studies."

Buffalo Museum of Science, Buffalo, New York, May 2003. "Songbird migration in Western New York: Radar and field studies."

Cayuga Bird Club, Ithaca, New York, May 2003. "Monitoring songbird migration at Braddock Bay."

Wild Birds Unlimited, Annual Meeting, Indianapolis, Indiana, June 2003. "Birds, science, and WBU: Citizen-science at the Cornell Lab of Ornithology."

## **INVITED SEMINARS:**

Nuttall Ornithological Society, Boston, Massachusetts, June 2023. "Public engagement in science: For birds, people, and conservation."

Universidade de São Paulo, Brazil, March 2023. "Engaging the public in science: For birds, people, and conservation."

University of Rhode Island, October 2018. "Insights on global bird populations gained by engaging the public in research."

Boyce Thompson Institute, May 2018. Computational Biology Symposium. "Generating 'big data' via public engagement: data acquisition, validation, and visualization at the Cornell Lab of Ornithology."

Florida State University/University of Florida. April 2015. "Data validation in citizen science." Webinar.

State University of New York College at Cobleskill, December 2013. "How does climate change impact our backyard birds?"

Bard College, March 2013. "Cache economy: "Smart" feeders and optimal foraging in birds."

Cornell Lab of Ornithology, October 2011. "Exploring movements, dominance, survival, and feeding behaviors in winter bird communities."

University of Delaware, October 2008. "Bird populations at the continental scale: What thousands of people can tell us about millions of birds."

Canisius College, November 2005. "Songbird migration in western New York: Radar and field studies."

Rochester Institute of Technology, September 2001. "Landbird Migration and Stopover Ecology in the Great Lakes Basin."

University of Vermont, School of Natural Resources, April 2001. "Methods for Studying Bird Migration."

SUNY College of Environmental Science and Forestry, Freshman Orientation Program, Fall 1998 and Spring 1999, "The Internet and the Environmental Sciences."

# EXTENSION: MEDIA HIGHLIGHTS

Media highlights include appearances on national television and radio shows and dozens of newspaper and magazine interviews: **Television**: *The Martha Stewart Show* (3); **Radio**: National Public Radio *Science Friday* (3), National Public Radio *Weekend Edition*, National Public Radio *The Diane Rehm Show*; **Print Media**: *BioScience*, *Baltimore Sun*, *Chicago Tribune*, *Discovery News*, *Houston Chronicle*, *National Wildlife* Magazine, *Scientific American*, *The New York Times*, *Outside* Magazine, *Time* Magazine, *USA Today*, and dozens of smaller media outlets.

#### AWARDS:

Cornell Faculty Excellence in Undergraduate Research Mentoring Award, 2020. The recipient of this award is selected annually by undergraduate students to recognize an outstanding research mentor

who goes above and beyond to foster and support research among emerging scholars, and who has made a deep and lasting impact on their academic careers at Cornell.

**Professor of Merit**, 2016. Cornell University, College of Agriculture and Life Sciences. This award recognizes **excellence in undergraduate teaching** and is considered prestigious by faculty because it is awarded by students.

American Ornithological Society, Fellow, 2015. Fellows are chosen for exceptional and sustained contributions to ornithology and/or service to the AOU.

American Ornithological Society, Elective Member, 2009. Elected for significant contributions to ornithology and/or service to the Union.

Great Lakes Research Consortium Don Rennie Memorial Student Award for excellence in research and presentation, March 2000.

# REVIEWS OF SCIENTIFIC MANUSCRIPTS:

2022: Proceedings of the Royal Society B; Ornithology

2021: Ethology; Frontiers in Climate; Journal of Field Ornithology (2); Northeastern Naturalist; Restoration Ecology

2020: Biology Letters; Functional Ecology; Journal of Applied Ecology; Journal of Field Ornithology (2)

2019: Animal Behaviour; Ecosphere; Ecological Applications; Journal of Field Ornithology (2)

2018: Auk; Behavioural Processes (2); BioScience; Diversity and Distributions; Ecography; Ethology Ecology & Evolution; Journal of Avian Biology; PLoS One (3)

2017: Animal Behaviour; Condor; Conservation Biology; Journal of Animal Ecology (3); PLoS One (2); Proceedings of the Royal Society B; Wilson Journal of Ornithology (2)

2016: Animal Behaviour; Auk; Behavioural Processes; Biological Invasions; BioScience; Journal of Animal Ecology, Journal of Field Ornithology; Northeast Naturalist; PLoS One (2), Wilson Journal of Ornithology

2015: Animal Behaviour; Auk; Conservation Biology; Conservation Physiology; Ibis, PLoS One (5); Journal of Applied Ecology; Journal of Biogeography; Journal of Field Ornithology (3); Sensors (2), 2014: PLoS One (3); Proceedings of the Royal Society B; Journal of Ornithology; Journal of Field

Ornithology; Ibis; Marine Ecology Progress Series; Biological Conservation

2013: Animal Behaviour; Biology Letters; Current Zoology; Ecology; Frontiers in Ecology and the Environment; International Journal of Biometeorology; Journal of Field Ornithology (4); PLoS ONE (3); Public Understanding of Science; Research Council of Canada; Studies in Avian Biology; Wilson Journal of Ornithology

2012: Cornell University Press; Ecosphere; Environmental Management; Journal of Field Ornithology; Proceedings of the Royal Society B; Wildlife Society Bulletin

2011: Condor; Journal of Avian Biology; Journal of Biogeography, Journal of Field Ornithology; Northeast Naturalist

2010: Journal of Biogeography; Ibis; USGS Report Series; Wilson Journal of Ornithology

2009: International Journal of Biometeorology; Journal of Field Ornithology; Wilson Journal of Ornithology

2008: Conservation Biology; Journal of Avian Biology

Pre-2008: American Midland Naturalist; Landscape and Urban Planning; Princeton University Press; Northeastern Naturalist; Urban Habitats; Wilson Journal of Ornithology