

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

### **Education**

**Ph.D.**, Biology, Dec 2011, **University of Maine**, Orono, ME  
Advisors: Dr. Rebecca Holberton and Dr. Peter Marra

**M.S.**, Wildlife Biology, May 2006, **Humboldt State University**, Arcata, CA  
Advisor: Dr. Matthew D. Johnson

**B.A.**, Anthropology, May 1999 **State University of New York**, Albany, NY

**Research interests:** animal migration, conservation biology, physiological ecology, behavioral ecology, population biology, stable isotope ecology, habitat ecology

### **Appointments and Awards**

Chair, Schiermeier Olentangy River Wetlands Research Park, The Ohio State Univ. (2022-present)  
Associate Professor, School of Environment and Natural Resources, The Ohio State Univ. (2021-present)

Assistant Professor, School of Environment and Natural Resources, The Ohio State Univ. (2014-2021)

George Didden Conservation Biology Fellowship, Smithsonian National Zoo (2014)

Post-doctoral Fellowship, Smithsonian Conservation Biology Institute (2012)

Outstanding Student Research Presentation Award, American Ornithologist Union (2011)

Graduate Prize in Animal Biology, University of Maine School of Biology and Ecology (2011)

Research Assistantship, University of Maine School of Biology and Ecology (2007-2010)

Teaching Assistantship, Humboldt State University Dept. of Wildlife and Dept of Biology (2004-2006)

### **Fellowships and Grants (\$2,338,282 in grants since 2014)**

Ohio Division of Wildlife, *Expanding and updating the Motus network in Ohio*. \$73,251 (included within Terrestrial Wildlife Ecology Lab Operational Support; 2022-2025)

Ohio Division of Wildlife, *Ohio bird conservation initiative*. \$385,036 (co-PI with Stephen Matthews; 2022-2025)

Ohio Division of Wildlife, *Advancing understanding of critical cerulean warbler habitat to maximize conservation across Ohio*. \$125,234 (co-PI with Stephen Matthews; 2022-2025)

U.S. Fish and Wildlife Service, *Assessing the risk to migratory birds of offshore wind on Lake Erie: Prevalence and spatial distribution of lake-crossing behavior*. \$84,224 (co-PIs: Mark Shieldcastle, Molly McDermott, Matthew Shumar; 2022-2024)

U.S. Fish and Wildlife Service, *Why are whip-poor-wills disappearing across the Midwest?* \$122,537 (co-PI; PI: Michael P. Ward, co-PIs: Thomas J. Benson, Stephen Matthews, and Frank R. Thompson III; 2022-2023)

Ohio Agricultural Research and Development Center, Internal Grants Program – Immediate Needs, *Assessing the risk to migratory birds of offshore wind on Lake Erie: Prevalence and spatial distribution of lake-crossing behavior*. \$49,996 (co-PI: Stephen Matthews; 2022-2023)

Ohio Agricultural Research and Development Center, OARDC SEEDS, *Interspecies transmission mechanisms of deltacoronavirus from birds to pigs*. \$80,000. (co-PI; Lead PI: Qiuhong Wang; co-PI: Scott Kenney; 2020-2022)

U.S. Fish and Wildlife Service, *Filling critical knowledge gaps in the Eastern Whip-poor-will annual cycle*. \$59,306 (co-PIs Michael P. Ward, Thomas J. Benson, Stephen Matthews, and Frank R. Thompson III; 2018-2020)

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

- The American Chestnut Foundation, *Reseeding restored forests: Can seed dispersal mutualisms amplify restoration of American chestnut (Castanea dentata)?* \$15,986 (co-PIs Stephen Mathews and Leila Pinchot; 2017-2020)
- Columbus Audubon Society, *Field testing modifications to existing avian architecture to improve low reproductive rates in Ohio's largest population of Prothonotary Warblers*, \$4,000 (co-PI with Elizabeth Ames; 2017)
- Ohio Agricultural Research and Development Center, OARDC SEEDS, *Will impacts of forest change on seed dispersal mutualisms amplify the decline in oak-hickory forests?* \$49,967 (co-PI Stephen Mathews; 2017)
- U.S. Fish and Wildlife Service, *Abundance and movement of Prothonotary Warblers in the non-breeding season in the core of the wintering range*, \$19,994 (co-PI with Lesley Bulluck and Catherine Vivrette; 2016-17)
- Ohio Sea Grant, *Emerald ash borer tree mortality and invasive species penetration into forested wetlands in the Lake Erie coastal zone: developing habitat restoration priorities*, \$9,933 (2016)
- Columbus Audubon Society, *Thinking inside the box: Evaluating the relative value of natural vs. artificial cavities in habitat patches of varying size for Prothonotary Warblers*, \$5,000 (2016)
- U.S. Fish and Wildlife Service, *Stopover Ecology and Migratory Connectivity of the Rusty Blackbird (Euphagus carolinus)*, \$10,000 (2016)
- Ohio Division of Wildlife, *Forest focus monitoring*, \$111,523 (co-PI; PI: Stephen Matthews)
- Ohio Division of Wildlife, *Responses of colonial wading bird populations within the Lake Erie Marsh Focus Area to cormorant control and wetland management*, \$380,355 (2015-19)
- Ohio Division of Wildlife, *Population ecology and habitat relationships of Sora and Virginia rails in northwestern Ohio*. Amount received: \$298,987 (co-PI with Bob Gates; 2015-2020)
- Smithsonian Institution Stable Isotope Research Post-doctoral Fellowship, \$49,000 (2013)
- Post-doctoral Travel Award, American Ornithologists Union, \$270 (2013)
- Smithsonian Institution Pre-doctoral Fellowship, \$29,000 (2011)
- National Science Foundation Doctoral Dissertation Improvement Grant, \$9,300 (2010)
- Wilson Ornithological Society Louis Agassiz Fuertes Award, \$2,500 (2010)
- University of Maine Graduate Student Government Award, \$650 (2009), \$823 (2010)
- American Ornithologist Union Student Research Award, \$1,000 (2008)
- Frank M. Chapman Research Award, American Museum of Natural History, \$1,500 (2008)
- Joseph Grinnell Student Research Award, Cooper Ornithological Society, \$1,000 (2008)
- Marin Rod and Gun Club Scholarship for Graduate Research in Wildlife, \$1,000 (2005)
- Mono Basin Bird Chautauqua Bird Research Grant, \$1,000 (2005)

### **Peer-reviewed Publications** (\*-student author, \*\*- Tonra Lab student author)

43. Hudon, J., K. McKenna, K. Donkor, S.M. Mahoney, **C.M. Tonra**, P.P. Marra, L.M. Ratcliffe, and M.W. Reudink. 2025 Feather carotenoids of the American Redstart (*Setophaga ruticilla*) across age and sex classes and the reliability of standard color metrics to capture pigment variation. **Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology** 275: 111027.
42. Peacock, J.\*\*, R. Macleod, G.M. Davies, T. Boorsma, and **C.M. Tonra**. 2024 Habitat selection of three Neotropical grassland birds is dependent on vegetation structure and resources. **Diversity** 16: 1-17.

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

41. Robertson, K.E.\*, E.H. Ellington, **C.M. Tonra**, and S.D. Gehrt. 2023. Stress in the city? Coyote hair cortisol varies with intrinsic and extrinsic factors within a heavily urbanized landscape. **Science of the Total Environment** 901: 165965.
40. Trevelline, B.K., D. Sprockett\*, W.V. DeLuca, C.R. Andreadis, A.H. Moeller, and **C.M. Tonra**. Convergent remodelling of the gut microbiome is associated with host energetic condition over long-distance migration. **Functional Ecology**: 2840-2854.
39. Rogers, S.L.\*, B.C. Verrelli, P.A. Bukaveckas, E.M. Ames\*\*, J. Youtz\*, T.J. Boves, E.I. Johnson, **C.M. Tonra**, and L.P. Bulluck. 2023. DNA metabarcoding reveals rangewide variation in aquatic diet of a riparian avian insectivore, the Prothonotary Warbler. **Ornithology** 140: ukad031.
38. Matthews, A.E.\*, T.J. Boves, A.D. Sweet, E.M. Ames\*\*, L.P. Bulluck, E.I. Johnson, M. Johnson, S.E. Lipshutz\*, K.L. Percy, D.W. Raybuck\*, W.M. Schelsky, **C.M. Tonra**, C.B. Viverette, A.J. Wijeratne. 2023. Novel insights into symbiont population structure: Globe-trotting avian feather mites contradict the specialist–generalist variation hypothesis. **Molecular Ecology**, 32: 5260-5275.
37. Cooper, N.W., B.C. Dossman\*, L.E. Berrigan, J. Morgan Brown, A.R. Brunner\*\*, H.E. Chmura, D.A. Cormier, C. Bégin-Marchand, A.D. Rodewald, P.D. Taylor, **C.M. Tonra**, J.A. Tremblay, and P.P. Marra. 2023. Songbirds initiate migratory flights synchronously after civil dusk. **Movement Ecology** 11: 24.
36. Skinner, A.A.\*\*\*, S.N. Matthews, M.P. Ward, I. Souza-Cole, J.R. Wright\*\*, F.R. Thompson III, T.J. Benson, **C.M. Tonra**. 2023. Agriculture and forest fragmentation are associated with nonbreeding home range size in the Eastern Whip-poor-will. **Ornithological Applications** 125: duac050.
35. Brunner, A.R.\*\*\*, B.C. Dossman\*, K.L. Percy, V. Jirinec\*, C.M. Tonra, E.I. Johnson, and P.P. Marra. 2022. Migratory behavior and connectivity revealed in a secretive Neotropical migratory songbird, the Swainson's Warbler. **Journal of Field Ornithology** 93: 10.5751/JFO-00134-930305.
34. Wright, J.R.\*\*\*, S.N. Matthews, C.C. Pinchot, and **C.M. Tonra**. 2022. Preferences of avian seed-hoarders in advance of potential American chestnut reintroduction. **Forest Ecology and Management** 511: 120133.
33. Brunner, A.R.\*\*\*, P.P. Marra, and **C.M. Tonra**. 2022. Vulnerable Neotropical migratory songbird demonstrates flexibility in space use in response to rainfall change. **Ornithology** 139: ukac005.
32. Skinner, A.A.\*\*\*, M.P. Ward, I. Souza-Cole\*, J.R. Wright\*\*, F.R. Thompson III, T.J. Benson, S.N. Matthews, and **C.M. Tonra**. 2022. High spatiotemporal overlap in the non-breeding season despite variable breeding latitudes in the Eastern Whip-poor-will (*Antrostomus vociferus*). **Diversity and Distributions** 28: 10.1111/ddi.13477
31. Pageau, C.\*, J. Sonnleitner, **C.M. Tonra**, M. Shaikh, and M.W. Reudink. 2021. Evolution of winter molting strategies in European and North American passerines. **Ecology and Evolution** 11: 10.1002/ece3.8047
30. Scarpignato, A.L., K.A. Stein\*\*, E.B. Cohen, P.P. Marra, L.J. Kearns, S. Hallager, and **C.M. Tonra**. 2021. Full annual cycle tracking of Black-crowned Night-Herons suggests wintering areas do not explain differences in colony population trends. **Journal of Field Ornithology** 92:143-155.
29. Peacock, J.\*\*\*, **Tonra, C.M.**, King, J.\*, and Davies, G.M., 2021. Restoration of gallery forest patches improves recruitment of motacú palms (*Attalea princeps*) while diversifying and increasing wildlife populations. **Plos One** 16: p.e0250183.

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

28. Hauber, M.E., S.K. Heath, and **C.M. Tonra**. 2020. Direct estimates of breeding site fidelity and natal philopatry in parasitic Brown-headed Cowbirds (*Molothrus ater*). **Ardea** 108:1-9.
27. Youtz, J.\*, K.D. Miller, E.K. Bowers, S. Rogers\*, L.P. Bulluck, M. Johnson, B.D. Peer, K.L. Percy, E.I. Johnson, E.M. Ames\*\*, **C.M. Tonra**, and T.J. Boves. 2020. Bergmann's rule is followed at multiple stages of development in a long-distance migratory songbird, but climate change may alter this relationship. **Ecology and Evolution** 10: 10.1002/ece3.6721
26. Wright, J.R.\*\*, L.L. Powell, S.N. Matthews, **C.M. Tonra**. 2020. Rusty Blackbirds select areas of greater habitat complexity during stopover. **Condor: Ornithological Applications** 122:duaa040.
25. Pageau, C.\*, **C.M. Tonra**, M. Shaikh, and M.W. Reudink. 2020. Evolution of moult-migration is directly linked to aridity of the breeding grounds in North American passerines. **Biology Letters** 16: 20200155.
24. Ames, E.A.\*\*, M.R. Gade\*, J.R. Wright\*, C.L. Nieman\*, **C.M. Tonra**, A.M. Tutterow\*, C.M. Marroquin\*, and S.M. Gray. 2020. Striving for population-level conservation: integrating physiology across the biological hierarchy. **Conservation Physiology** 8:10.1093/conphys/coaa019.
23. Reese, J.\*, C. Viverette, **C.M. Tonra**, N.J. Bayly, T.J. Boves, E. Johnson, M. Johnson; P.P. Marra, E.M. Ames\*\*, A. Caguazango, M. DeSaix\*, A. Matthews, A. Molina, K. Percy, M.C. Slevin, L.P. Bulluck. 2019. Using stable isotopes to estimate migratory connectivity for a patchily-distributed, wetland-associated Neotropical migrant. **The Condor: Ornithological Applications** 121:duz052.
22. **Tonra, C.M.**, J.R. Wright\*\*, and S.N. Matthews. 2019. Remote estimation of overwintering home ranges in an elusive, nocturnal migratory bird. **Ecology and Evolution** 9:12586–12599.
21. Bulluck, L.P., E.M. Ames\*\*, N. Bayly, J. Reese\*, C. Viverette, J.R. Wright\*\*, A. Caguazango, and **C.M. Tonra**. 2019. Habitat-dependent occupancy and movement in a migrant songbird highlights the importance of mangroves and forested lagoons in Panama and Colombia. **Ecology and Evolution** 9: 11064–11077
20. Weigand, N.\*, R. Wagner, **C.M. Tonra**, and V.D. Popescu. 2019. Proximity to highways has limited influence on space use and physiology of terrestrial testudines. **European Journal of Wildlife Research** 65:80.
19. DeSaix, M.\*, L.P. Bulluck, A. Eckert, C. Viverette, T.J. Boves, J. Reese\*, **C.M. Tonra**, and R. Dyer. 2019. Population assignment reveals low migratory connectivity in a weakly structured songbird. **Molecular Ecology** 28: 2122-2135.
18. **Tonra, C.M.**, M. Hallworth, T. Boves, J. Reese\*, L. Bulluck, M. Johnson, C. Viverette, K. Percy, E.A. Ames\*\*, A. Matthews\*, M.C. Slevin\*, R.R. Wilson, and E.I. Johnson. 2019. Concentration of a widespread breeding population in few critically important nonbreeding areas: Migratory connectivity in Prothonotary Warbler. **The Condor: Ornithological Applications** 121: duz019.
17. Reese, J.\*, **C.M. Tonra**, C. Viverette, P.P. Marra, and L.P. Bulluck. 2018. The influence of age, sex, year, and feather type on hydrogen isotope variation in a wetland-associated songbird. **Waterbirds** 41:247-256.
16. **Tonra, C.M.** and M.W. Reudink. 2018. Expanding the traditional definition of molt-migration. **The Auk: Ornithological Advances** 135:1123-1132.
15. Wright, J.R.\*\*, L.L. Powell, and **C.M. Tonra**. 2018. Automated telemetry reveals staging behavior in a declining migratory passerine. **The Auk: Ornithological Advances** 135:461-476

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

14. Wright, J.R.\*\* , **C.M. Tonra**, and L.L. Powell. 2018. Prealternate molt-migration in Rusty Blackbirds and its implications for stopover biology. **The Condor: Ornithological Applications** 120:507-516.
13. **Tonra, C.M.**, K. Sager-Fradkin, and P.P. Marra. 2016. Barriers to salmon migration impact body condition, offspring size, and life history variation in an avian consumer. **Ecography** 39:1056–1065.  
**\*Journal Cover Article**
12. **Tonra, C.M.**, K. Sager-Fradkin, S. Morley, J. Duda, and P.P. Marra. 2015. The rapid return of marine-derived nutrients to a freshwater food web following dam removal. **Biological Conservation** 192:130-134.
11. Marra, P.P., E.B. Cohen, S.R. Loss, J. Rutter, and **C.M. Tonra**. 2015. A call for full annual cycle research in animal ecology. **Biology Letters** 11:20150552.
10. **Tonra, C.M.**, C. Both, and P.P. Marra. 2015. Incorporating site dependence and year-specific deuterium ratios ( $\delta^2\text{H}$ ) from precipitation into geographic assignments of a migratory bird. **Journal of Avian Biology** 46:266-274.
9. Tonra, C.M., K.L.D. Marini\*, P.P.Marra, R.R. Germain, R.L. Holberton, and M.W. Reudink. 2014. Color expression in experimentally regrown feathers of an overwintering migratory bird: implications for signaling and seasonal interactions. **Ecology and Evolution** 4:1222-1232.
8. **Tonra, C.M.**, P.P. Marra, and R.L. Holberton. 2013. Experimental and observational studies of seasonal interactions between overlapping life history stages in a migratory bird. **Hormones and Behavior** 64:825–832.
7. Croston, R.\* , **C.M. Tonra**, S.K. Heath, and M.E. Hauber. 2012. Flange color differences in brood parasitic Brown-headed Cowbirds from nests of two host species. **Wilson Journal of Ornithology** 124:139-145.
6. **Tonra, C.M.**, P.P. Marra, and R.L. Holberton. 2011. Early elevation of testosterone advances migratory preparation in a songbird. **Journal of Experimental Biology** 214:2761-2767.
5. **Tonra, C.M.**, P.P. Marra, and R.L. Holberton. 2011. Migration phenology and winter habitat quality are related to circulating androgen in a long-distance migratory bird. **Journal of Avian Biology** 42:397-404.
4. Angelier F., **C.M. Tonra**, R.L. Holberton, and P.P. Marra. 2011. Short-term changes in body condition in relation to habitat and climate in American redstarts during the non-breeding season. **Journal of Avian Biology** 42:355-341.
3. Angelier F., **C.M. Tonra**, R.L. Holberton, and P.P. Marra. 2010. How to capture wild passerine species to study baseline corticosterone levels. **Journal of Ornithology** 151:415-422.
2. **Tonra, C.M.**, M.D. Johnson, M.E. Hauber, and S.K. Heath. 2009. Does nesting habitat influence hatching synchrony between brood parasitic brown-headed cowbirds (*Molothrus ater*) and two hosts? **Ecography** 32:497-503.
1. **Tonra, C.M.**, M.E. Hauber, S.K. Heath, and M.D. Johnson. 2008. Ecological correlates and sex differences in early development of a generalist brood parasite. **Auk** 125:205-213.

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

### **Manuscripts in review/revision** (\*-student author, \*\*- Tonra Lab student author)

Korpi, Z.O.\*\* , S.N. Matthews, M. Shumar, M. McDermott, D. Russell, L. DeGroot, R. Jacob, M. Shieldcastle, and C.M. Tonra. *In revision*. Spatial and species-specific variation in lake-crossing behavior in the Great Lakes Region influences collision risk with offshore wind development.

#### **Ornithological Applications.**

Skinner, A.A.\*\* , A. Korpach, ..., Tonra, C.M., et al. *In revision*. Environmental pressures on the breeding grounds drive Bergmannian clines in nightjars. **Journal of Biogeography**.

Tsuru, B.R.\*\* and C.M. Tonra. *In review*. A framework of hypotheses for studying post-breeding ecology and trade-offs in migratory birds. **Ornithology**.

Ralston, R.J.\*\* and C.M. Tonra. *In review*. Full annual cycle drivers of phenology in a migratory bird reveal implications for spatial variation in vulnerability to climate change. **Global Change Biology**.

Turner, S.\*\* , C.M. Tonra, B. Dossman, M. Shaikh, I.A. Ciaburri\*\*, C. Robinson, P.P. Marra, and M.R. Reudink. *In review*. Variation in the timing, intensity, and patterns of prealternate molt in six nonbreeding Nearctic-Neotropical migratory songbirds. **Journal of Field Ornithology**.

Wright, J.R.\*\* , S.N. Matthews, C.C. Pinchot, and C.M. Tonra. *In review*. From selection to seedlings: Tracking the fate of chestnuts and acorns cached by Blue Jays (*Cyanocitta cristata*). **Ecological Applications**.

### **Other Publications**

Soulliere, G.J., M.A. Al-Saffar, K.R. VanBeek, C.M. Tonra, M.D. Nelson, D.N. Ewert, T. Will, W.E. Thogmartin, K.E. O'Brien, S.W. Kendrick, A.M. Gillet, J.R. Herkert, E.E. Giese, M.P. Ward, and S. Graff. 2020. Upper Mississippi / Great Lakes Joint Venture Landbird Habitat Conservation Strategy – 2020 Revision. U.S. Fish and Wildlife Service, Bloomington, Minnesota, USA.

Tonra, C.M. 2019. Book Review: For the Birds: American Ornithologist Margaret Morse Nice. **Auk: Ornithological Advances** 136: ukz021.

Tonra, C.M. 2018. "Bio Box: Margaret Morse Nice". In *Ornithology: Foundation, Critique, and Application*. Eds.: Morrison, M.L., Rodewald, A.D., Voelker, G., Prather, J.F., Colón, M.R.

Soulliere, G.J., M. A. Al-Saffar, R.L. Pierce, M.J. Monfils, L.R. Wires, B.W. Loges, B.T. Shirkey, N.S. Miller, R.D. Schultheis, F.A. Nelson, A.M. Sidie-Slettedahl, C.M. Tonra, and D.J. Holm. 2018. Upper Mississippi River and Great Lakes Region Joint Venture Waterbird Habitat Conservation Strategy – 2018 Revision. U.S. Fish and Wildlife Service, Bloomington, Minnesota, USA.

Tonra, C.M. 2011. The role of breeding preparation in migration phenology and seasonal interactions in migratory passerines. Doctoral Dissertation, University of Maine, Orono, ME

Tonra, C.M. 2006. The influence of habitat on hatching asynchrony in the Brown-headed Cowbird. M.S. Thesis, Humboldt State University, Arcata, CA.

Heath, S.K., L.A. Culp, H.R. Gates, Q.S. Latif, and C.M. Tonra. 2004. Riparian songbird monitoring in the Eastern Sierra: results of the 2003 field season and selected 1998-2003 summary results. PRBO contribution #1171. Stinson Beach, CA.

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

### **Teaching Experience**

#### ***School of Environment and Natural Resources, The Ohio State University:***

Avian Biology and Management (ENR5364.02), Spring 2015-25  
Introduction to Fisheries Forestry and Wildlife (ENR3300), Fall 2014-23  
Graduate Seminar - Animal Movement (ENR 8890.01), Fall 2015, 2017, 2019, 2021, 2023  
Forestry Fisheries and Wildlife Capstone (ENR 4900.02), Fall 2016  
Graduate Seminar – Stable Isotopes in Wildlife Ecology (ENR 8890.01), Fall 2018  
Ecology and Conservation of Birds (ENR2360 at Stone Lab), Summer 2022  
Introduction to Biological Studies– Birds (EEOB 1920 at Stone Lab), Summer 2016-19

#### ***Other:***

University of Texas San Antonio, Department of Environmental Science and Ecology. Graduate Level Ornithology Course. Guest Lecturer (2019; Virtual).  
Biogeography (GES313), University of Maryland Baltimore County, Guest Lecturer, 18 Nov 2013  
Introduction to Migratory Birds, Adult Education Class for Friends of the National Zoo- Nov, 2013  
Plant Taxonomy (BOT350), HSU Biology Dept - *Laboratory Instructor*, Spring 2005, Fall 2005  
General Botany (BOT105), HSU Biology Dept- *Laboratory Instructor*, Spring 2004, Fall 2004  
Ornithology (WLDF365), HSU Wildlife Dept- *Teaching Assistant*, Spring 2005&2006, Fall 2005  
Wildlife Techniques (WLDF311), HSU Wildlife Dept- *Teaching Assistant*, Fall 2004

### **Graduate Students Advised**

#### **PhD**

Jo Peacock (co-advised with Dr. G. Matt Davies, Graduated 2022)  
James Wright (co-advised with Dr. Stephen Matthews, Graduated 2022)  
Elizabeth Ames (Graduated 2021)

#### **Master or Science**

Ivy Ciaburri (current)  
Zoe Korpi (co-advised with Dr. Stephen Matthews, current)  
Rebecca Ralston (current)  
Carl Engstrom (co-advised with Dr. Stephen Matthews, current)  
Shae Turner (Thompson Rivers University, co-advised with Dr. Matthew Reudink, current)  
Brian Tsuru (Graduated 2023)  
Aaron Skinner (Graduated 2022)  
James Hansen (co-advised with Dr. Robert Gates, Graduated 2019)  
Kristie Stein (Graduated 2018)  
Alicia Brunner (Graduated 2018)  
James Wright (Graduated 2017)

### **Undergraduate Research Students Advised**

Josh Davidson, Honors Research Distinction (current)  
Holly Erickson, Honors Research Distinction (current)  
Leah Kloboves, Research Distinction (Graduated 2024)  
Emma Robinson, Research Distinction (Graduated 2024)  
Avani Salunkhe Summer Research Opportunities Program student from Penn State (Summer 2023)  
Anna Rose, Honors Research Distinction (Graduated 2023)

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

Gautam Apte, Research Distinction (Graduated 2022)  
Valerie Gaulke, Honors Research Distinction (Graduated 2021)  
Kevin Perozini, Honors Research Distinction (Graduated 2021)  
Tyler Ficker, Research Distinction (Graduated 2020)  
Kandace Glanville, Research Distinction (Graduated 2019)  
Adam Cupito, Research Distinction (Graduated 2018)  
Kaitlin Carr, Research Distinction (Graduated 2018)  
Katherine Denune, Research Distinction (Graduated 2018)  
Kira Edic (Graduated 2017)

### **Service (The Ohio State University)**

#### *School of Environment and Natural Resources*

Academic Affairs Committee (2015-2023)  
Graduate Fellowship Nomination Committee (2015, 2016, 2023)  
Faculty Search Committee: Wetland/Stream Ecologist (2023-2024)  
Faculty advisor to the OSU Ornithology Club (2018-present)  
Environmental Professionals Network Breakfast, Master of Ceremonies (Jul 2023)  
SENR Seminar Series Speaker Host – Than Boves (Apr 2023)  
Fundraising Events – Stone Lab/Olentangy River Wetland Research Park Winter Program (Feb 2023),  
Ohio Wildlife Center Fundraiser, Columbus Zoo (Apr 2023), SENR Alumni Homecoming Event  
(Oct 2023)  
Chair, ad hoc Olentangy River Wetlands Research Park Leadership Transition Committee (Summer  
2022)  
Faculty search committee: Ecosystem Health – Wildlife Disease (joint with VPM; 2019)  
SENR Seminar Series Speaker Host – Matthew D. Johnson (Sep 2019)  
Co-organized Environmental Professionals Network Breakfast - Land Grant to Land Grant: Lessons in  
Sustainability from a Brewery in our Backyard. Speaker: Vincent Valentino (Jan 2018)  
Ad hoc Committee to revise evaluation of instruction materials in Promotion & Tenure guidelines (Oct  
2017-Jan 2018)  
Faculty search committee: Ecosystem Health – Wildlife Disease (joint with VPM; 2018)  
SENR Seminar Series Speaker Host – Jared Wolfe (Nov 2018)  
ENR1100 - Held group discussion/Q&A with incoming FFW students (2017)  
SENR Seminar Series and Environmental Professionals Network Speaker Host – Peter P. Marra (Nov  
2017)  
Faculty Search Committee: Wildlife Ecologist (2015)  
SENR Seminar Series Speaker Host – Brian Gratwicke (2015)  
SENR Seminar Series Speaker Host – T. Scott Sillett (2015)

#### *College of Food, Agriculture and Environmental Science/The Ohio State University*

PIPP Red Team Grant Review Panel (Department of Plant Pathology; Nov 2023)  
Proposal peer-review for Translational Data Analytics Institute (Jan 2023)  
OSU Environmental Film Series, Discussion Panel Member: Return of the River (Feb 2017) &  
The Messenger (Oct 2017)

#### *Graduate Committees*

PhD



## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

### *School of Environment and Natural Resources*

Ningzhu Bai (current)  
Bethany Williams (Graduated 2023)  
Meaghan Gade (Graduated 2021)  
Philip Gould (Graduated 2021)  
Bryce Adams (Graduated 2018)

### *Department of Evolution Ecology and Organismal Biology*

Jamin Wieringa (Graduated 2022)  
Andrew Bade (Graduated 2021)  
Geoffrey Gould (Graduated 2020)  
Donella Bolen (2015, through candidacy examination only)

### *Virginia Commonwealth University, Center for Environmental Studies*

Samantha Rogers (Graduated 2023)

### Master of Science

### *School of Environment and Natural Resources*

John Eshem (current)  
Anna Rose (current)  
Luz Mercado Callau (current)  
Joe Hinz (Graduated 2024)  
Victoria Drumm (Graduated 2024)  
Jennifer Myers (Graduated 2023)  
Evan Amber (Graduated 2021)  
Nicole Hengst (Graduated 2021)  
Leanna DeJong (Graduated 2020)  
Lana Milbern (Graduated 2020)  
Sara Adamczak (Graduated 2019)  
Lewis Lolya (Graduated 2019)  
Kaitlin Kinney (Graduated 2017)  
Kaley Donovan (Graduated 2016)  
Jenna Odegard (Graduated 2016)  
Olivia Smith (Graduated 2015)

### *Department of Animal Science*

Zachary England (Graduated 2021)

### *Department of Evolution Ecology and Organismal Biology*

Maddy Ybarra (current)  
Keith Shane (Graduated 2018)

### *Department of Civil, Environmental, and Geodectic Engineering*

Miriam Handler (Graduated 2019)  
Krystaal McClain (Graduated 2015)

### *Virginia Commonwealth University, Center for Environmental Studies*

Jessie Reese (Graduated 2017)

## **Professional Service (External to The Ohio State University)**

**Associate Editor:** Ornithology (2018-2023)

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

**Ad hoc reviewer for:** *American Naturalist, Auk: Ornithological Advances, Avian Conservation and Ecology, Behavioral Ecology, Biological Conservation, Biology Letters, Bird Study, Canadian Journal of Zoology, Condor: Ornithological Applications, Ecology, Ecology and Evolution, Hormones and Behavior, Ibis, General and Comparative Endocrinology, Journal of Animal Ecology, Journal of Field Ornithology, Nature Communications, Proceedings of the Royal Society B, Studies in Avian Biology, Physiology and Behavior*

**American Ornithological Society: Fellow,** Early Career Professionals Committee (2013-2018),  
Historical Committee (2013-2015), Student Presentation Awards judge (2014)

**Ohio Ornithological Conference:** Organizing Committee and Keynote Speaker Host (2023)

**U.S. Fish and Wildlife Service:** Upper Mississippi River Great Lakes Region Migratory Bird Joint  
Venture Science Team (Landbirds Technical Committee 2015-2017, co-chair 2018-present;  
Waterbirds Technical Committee 2015-2017)

**Midwest Migration Network:** Steering committee member (2015-2019), Telemetry Working Group  
leader (2015-2018)

**National Science Foundation:** Ad-hoc reviewer (2015, 2017, 2023), Pre-proposal panel member (IOS-  
Animal Behavior, 2017)

**External Reviewer for Promotion and Tenure:** University of Oklahoma (2023)

**External Examiner** - University of Saskatchewan - M.S. thesis defense for Jess M. Cosentino (2021)

**Collaborative Species Conservation and Research:** Rusty Blackbird Working Group;  
Prothonotary Warbler Working Group

**Society for Conservation Biology:** Abstract reviewer, Student Awards reviewer and judge (2014)

**Smithsonian Conservation Biology Institute:** Seminar series organizer (2013-2014); Stable Isotope  
Research Post-doctoral Fellowship reviewer (2016)

**Cooper Ornithological Society:** Joseph Grinnell Student Research Award reviewer (2016)

**Center for Global Change:** Reviewer for 2014 Global Change Student Research Grant Competition

### **Professional Symposia Organized**

79th Annual Midwest Fish and Wildlife Conference, Cleveland, OH (2019) Science in service to  
wetlands conservation and wildlife management in the lower Great Lakes region: history, status, and  
state of the art. (co-organized with: Robert Gates, OSU; Brendan Shirkey and John Simpson,  
Winous Point Marsh Conservancy)

American Ornithological Society Annual Meeting, Tucson, AZ (2018) Ecology, evolution, and  
conservation of molt-migration. (co-organized with Jared Wolfe, Michigan Tech)

American Ornithologist's Union/Cooper Ornithological/Society of Canadian Ornithologists Joint  
Annual Conference Estes Park, CO (2014) Successes and Challenges in Riparian Restoration: Birds  
as the Yardstick (co-organized with Tom Gardali, Point Blue Conservation Science)

### **Invited Professional Symposia and Seminars**

STEAM Factory, STEAM Exchange, Columbus, OH (Mar 2024). Where do they all go?: Using tracking  
technology to reveal the mysteries of bird migration.

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

- Great Lakes Commission Annual Meeting, Maumee, OH (October 2023). Invited Panelist: Stories in Great Lakes Bird Conservation.
- Bowling Green State University, Department of Biological Sciences Seminar Series, Bowling Green, OH (March 2023). Goatsuckers on the Move: Migration and Winter Ecology of the Midwest's Eastern Whip-poor-wills.
- Kenyon College, Department of Biology Seminar Series, Gambier, OH (March 2023). Goatsuckers on the Move: Migration and Winter Ecology of the Midwest's Eastern Whip-poor-wills.
- Smithsonian Migratory Bird Center/Center for Conservation Genetics Seminar Series, Washington, D.C. (February 2023). Goatsuckers on the Move: Migration and Winter Ecology of the Midwest's Eastern Whip-poor-wills.
- University of Maine, Department of Wildlife, Fisheries, and Conservation Biology (September 2021). Goatsuckers on the Move: Migration and Winter Ecology of the Midwest's Eastern Whip-poor-wills.
- Society of Canadian Ornithologists Annual Conference, Quebec City, QB, Canada (August 2019). Full annual cycle ecology and conservation of migratory birds in the lower Great Lakes. Symposium: Symposium: Tracking migratory waterbirds using new technologies.
- 79<sup>th</sup> Annual Midwest Fish and Wildlife Conference, Cleveland, OH (January 2019). Full annual cycle ecology and conservation of migratory birds in the lower Great Lakes. Symposium: Science in service to wetlands conservation and wildlife management in the lower Great Lakes region: history, status, and state of the art.
- University of Illinois Urbana-Champaign, Department of Natural Resources and Environmental Sciences Seminar Series (October 2018). Pulling Back the Curtain on Migratory Bird Behavior and Ecology Using MOTUS.
- The Ohio State University Environmental Science Graduate Program Seminar Series (September 2018) Pulling Back the Curtain on Migratory Bird Behavior and Ecology Using MOTUS.
- American Ornithological Society Annual Meeting, Tucson, AZ (April 2018) Expanding the Traditional Definition of Molt-Migration (M.W. Reudink, co-author); Symposium: Ecology, evolution, and conservation of molt-migration.
- University of North Carolina Wilmington, Department of Biology and Marine Biology Seminar Series (March 2018), Pulling Back the Curtain on Migratory Bird Behavior and Ecology Using MOTUS.
- Inland Bird Banding Association Annual Meeting, Kalamazoo, MI (October 2017), Keynote Address: Pulling Back the Curtain on Migratory Behavior and Ecology Using MOTUS in the Great Lakes.
- Virginia Tech University, Ecology, Evolution, and Behavior Seminar Series (March 2017) Pulling Back the Curtain On Migratory Behavior and Ecology Using Automated and Satellite Telemetry in the Great Lakes.
- Duquesne University, Biology Department Seminar Series (November 2016) Resource Limitation at the Aquatic-Terrestrial Boundary: Barriers to Salmon Migration Change Everything for a Songbird.
- Ohio University, Biology Dept. Seminar Series (Sept 2016) Resource Limitation at the Aquatic-Terrestrial Boundary: Barriers to Salmon Migration Change Everything for a Songbird.
- 6<sup>th</sup> Quadrennial North American Ornithological Conference, Washington, DC (2016) Adventitious molt in an overwintering migratory bird: color change, carotenoid content, and implications for seasonal interactions. (M.W. Reudink, K. Marini, K. McKenna, K. Donkor, R. Holberton, R. Germain, P.P. Marra). Symposium: Adding Molt to the Full-annual-cycle Perspective on Avian Conservation
- Humboldt State University, Wildlife Ecology Series (March 2016) Resource Limitation at the Aquatic-Terrestrial Boundary: Barriers to Salmon Migration Change Everything for a Songbird.
- The Ohio State University, School of Environment and Natural Resources Seminar Series (April 2015) Avian Ecology in the Context of the Full Annual Cycle.

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

- Arkansas State University, Dept. of Biological Sciences Seminar Series (Feb 2015) Avian Ecology in the Context of the Full Annual Cycle.
- American Ornithologist's Union/Cooper Ornithological Society/ Society of Canadian Ornithologists Joint Annual Conference, Estes Park, CO (2014) Tracking the return of critical nutrient subsidies to western riparian ecosystems following dam removal: the value of songbirds as bio-indicators (P.P. Marra and K. Sager-Fradkin, co-authors). Symposium: Successes and Challenges in Riparian Restoration: Birds as the Yardstick.
- 5<sup>th</sup> Quadrennial North American Ornithological Conference, Vancouver, BC (2012) The nexus of non-breeding, migratory, and breeding life history stages in migratory songbirds (P.P. Marra, D. Willard, and R.L. Holberton, co-authors). Symposium: Hot Topics in the Tropics: Research to Support Full Life-cycle Conservation of Migrants.
- Smithsonian Conservation Biology Institute Seminar Series (2012) The Confluence of Non-Breeding, Migratory, and Breeding Life History Stages: Observational and Experimental Studies In Passerines.
- University of Maine Biology Club Seminar, Orono, ME (2010) Birds of Two Worlds: Connecting Winter and Summer Events in Migratory Songbirds.
- AOU/CSO/COS Joint Annual Conference, Portland, OR (2008) Navigating the trail to the grail: A physiological codex in search of body condition. (R.L. Holberton, presenter; E.M. Adams, S.M. Agius, K.M. Covino, A.J. Leppold, C.M. Tonra, W.A. Wright, co-authors); Symposium: Body condition of birds: the search for the Holy Grail.
- Humboldt State University Ecology Series, Arcata, CA (2005 and 2006) Influence of host and habitat on Brown-headed cowbird productivity.

### Oral Papers

- Association of Field Ornithologists Annual Conference, Plymouth, MA. High spatiotemporal overlap in the non-breeding season despite geographically dispersed breeding locations in the Eastern Whip-poor-will (*Antrostomus vociferus*). (Skinner, A.A., M.P. Ward, I. Souza-Cole, J.R. Wright, F.R. Thompson III, T.J. Benson, and S.N. Matthews, co-authors).
- American Ornithological Society Annual Meeting, Anchorage, AK (June 2019). Full annual cycle ecology and conservation of migratory birds in the lower Great Lakes.
- Association of Field Ornithologists/Wilson Ornithological Society Joint Annual Meeting, Cape May, NJ (October 2019). Concentration of a widespread breeding population in few critically important nonbreeding areas: Migratory connectivity in Prothonotary Warbler. (M. Hallworth, T. Boves, J. Reese, L. Bulluck, M. Johnson, C. Viverette, K. Percy, E.A. Ames, A. Matthews, M.C. Slevin, R.R. Wilson, and E.I. Johnson, co-authors).
- Ohio Avian Research Conference, Granville, OH (2014) Tracking the return of critical nutrient subsidies to western riparian ecosystems following dam removal: the value of songbirds as bio-indicators (P.P. Marra and K. Sager-Fradkin, co-authors).
- International Congress on Conservation Biology, Baltimore, MD (2013) Tracking responses to marine derived nutrients in riparian consumers in the context of the largest dam removal in United States history. (P.P. Marra and K. Sager-Fradkin, co-authors).
- American Ornithologist's Union/Cooper Ornithological Society Joint Annual Conference, Chicago, IL (2013) Tracking responses to marine derived nutrients in American dippers in the context of the largest dam removal in history. (P.P. Marra and K. Sager-Fradkin, co-authors).
- American Ornithologist's Union Annual Conference, Jacksonville, FL (2011) The role of androgens in seasonal interactions: observational and experimental studies in the American Redstart. (P.P. Marra and R.L. Holberton, co-authors). **\*Awarded Outstanding Student Research Presentation**

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

- Ecological Society of America Annual Conference, Pittsburgh, PA (2010) Balancing the demands of migration and the physiological transition to breeding in Neotropical songbirds: a dual role for testosterone? (P.P. Marra and R.L. Holberton, co-authors)
- American Ornithologist's Union Annual Conference, Philadelphia, PA (2009) The physiological underpinnings of seasonal interactions in a Neotropical migrant songbird. (P.P. Marra and R.L. Holberton, co-authors)
- Hubbard Brook Ecosystem Study Annual Conference, North Woodstock, NH (2009) The role of breeding hormones in seasonal interactions in a Neotropical migrant songbird. (P.P. Marra and R.L. Holberton, co-authors)
- American Ornithologist's Union Annual Conference, Santa Barbara, CA (2005) Habitat as a predictor of hatch synchrony in the Brown-headed Cowbird. (M.D. Johnson, S.K. Heath, M.E. Hauber, co-authors)

### **Invited General Public Outreach Seminars and Workshops**

- Worthington Estates Elementary School (Oct 2024). Bird Friendly Backyards
- Worthington Library, Worthington OH (June 2024). Introduction to Birding and a Bird Friendly Backyard
- Columbus Science Pub, Columbus, OH (December 2023). The Science of Surviving the Suburbs: Opportunities for Our Feathered Neighbors.
- Pilchuck Audubon Society, Snohomish, WA Dippers (Nov 23) Barriers to salmon migration change everything for a songbird. (virtual)
- Becoming Home Festival – Pickerington, Columbus, OH (September 2023). The Science of Surviving the Suburbs: Opportunities for Our Feathered Neighbors.
- Science N' Suds, Parsons North Brewing, Columbus, OH (April 2023). Where do they all go?: Using tracking technology to reveal the mysteries of bird migration.
- Olympic National Park, Port Angeles, WA (February 2023). Barriers to salmon migration change everything for a songbird. (virtual)
- OSU Zoology Club, Columbus OH (November 2022). Goatsuckers on the Move: Migration and Winter Ecology of the Midwest's Eastern Whip-poor-wills.
- Stone Lab research review for members of the press, delivered via Zoom. (August 2022). Pulling Back the Curtain on Migratory Bird Behavior and Ecology Using MOTUS.
- Columbus Science Pub, Columbus, OH (August 2021). The Science of Surviving the Suburbs: Opportunities for Our Feathered Neighbors.
- Cape Fear Audubon, Wilmington, NC (October 2021) Pulling Back the Curtain On Migratory Bird Behavior and Ecology Using MOTUS (delivered via Zoom).
- OSU Extension Webinar Series, Columbus OH. (Feb 2021) Goatsuckers on the Move: Migration and Winter Ecology of the Midwest's Eastern Whip-poor-wills (delivered via Zoom).
- Columbus Science Pub, Columbus, OH (April 2020) The feathered superhighway over our heads (delivered via Zoom).
- Ohio Wildlife Biodiversity Conference, Columbus, OH (March 2020) Migration and Winter Ecology of Ohio's Eastern Whip-poor-wills.
- STEAM Factory Festivus Celebration, Franklinton Fridays, Columbus, OH (December 2018) Ohio's Winter Birds – How They Survive and What You Can Do to Help.
- Delaware County Bird Club, Delaware, OH (Sep 2018) Barriers to Salmon Migration Change Everything for a Songbird.
- Columbus Science Pub, special event at COSI (August 2018) The Feathered Superhighway Over Our Heads.

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

Columbus Science Pub, Columbus, OH (April 2018) The Feathered Superhighway Over Our Heads.  
OSU Extension Woodland, Water, and Wildlife conference, Mansfield, OH (Feb 2017) Migratory Birds of Ohio's Lake Erie region: Where do they go and How Do They Get There  
Grange Insurance Scioto Audubon Center (Jan 2016) Full Annual Cycle Research in the Birds of Ohio.  
Delaware County Bird Club (Oct 2015) Full Annual Cycle Research in the Birds of Ohio.  
Buckeye Lake Historical Society Seminar Series (June 2015) Avian Ecology in the Context of the Full Annual Cycle.  
Audubon Dungeness River Center Special Program, Sequim, WA (2012) Impacts of obstructions to salmon migration on riparian ecosystems on the Olympic Peninsula. Invited seminar given to local public on ongoing research for my Smithsonian Post-doc.  
Parsons Memorial Lodge Summer Seminar Series, Yosemite National Park, CA (2006) *Parasites in Paradise: the Brown-headed Cowbird in the Mono Basin.*  
Refreshments with Refreshing Biologists, Lee Vining, CA (2003 and 2005) *Influence of habitat on Brown-headed Cowbird productivity.*  
Mono Basin Bird Chautauqua, Lee Vining, CA (2004 - 2006) *Feeder Cafe Workshop.*

### **Conference Posters**

American Ornithological Society/Society of Canadian Ornithologists Joint Annual Conference, East Lansing, MI (2017) Migratory Movements and Wintering Locations of a Threatened Population of Black-crowned Night-Herons (C.M. Tonra, Kristie Stein, and L. Kearns)  
American Ornithologist's Union/Cooper Ornithological Society Joint Annual Conference, Chicago, IL (2013) Using building strikes in Chicago to compare the relative influence of endogenous and environmental factors on breeding preparation in migrating Ovenbirds. C.M. Tonra, R.L. Holberton, and P.P. Marra  
Association of Field Ornithologists Annual Conference, Ogden, UT (2010) Is there evidence for host-parasite flange color matching in Brown-headed Cowbirds (*Molothrus ater*) and their hosts? R. Croston (presenter), C.M. Tonra, S.K. Heath, M.E. Hauber.  
American Ornithologist's Union Annual Conference, Philadelphia, PA (2009) A novel "pita" design for hormone manipulations in small birds. R.L. Holberton, K.N. Porcelli, C.M. Tonra.

### **Popular Writings**

Ohio State University Extension Woodland Stewards Newsletter (Summer-Fall 2015). Critter Corner: Song Sparrow - *Melospiza melodia*  
Smithsonian Migratory Bird Center Bird of the Month, March 2011: The Dark Side of Migratory Birds: the Brown-headed Cowbird. [http://nationalzoo.si.edu/scbi/migratorybirds/featured\\_birds](http://nationalzoo.si.edu/scbi/migratorybirds/featured_birds)

### **Co-authored Student Presentations (\* - student presenter)**

Ciaburri\*, I.A., B. Dossman, P.P. Marra, M.R. Reudink, C.M. Tonra. 2023. Assessing breeding to nonbreeding carry-over effects in the American Redstart through feather quality. Joint Annual Meeting of the American Ornithological Society and the Society of Canadian Ornithologists, London, ON, Canada.  
Tsuru, B.R.\*, E.A. Ames, C.M. Tonra. 2023. Post-breeding ecology in the Prothonotary Warbler: Evaluating potential trade-offs between breeding, molt, and migration. Joint Annual Meeting of the

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

American Ornithological Society and the Society of Canadian Ornithologists, London, ON, Canada.

### **\*Student Presentation Award Winner**

- Korpi, Z.O.\* , S Matthews, R. Jacob, M. McDermott, D Russell, M. Shieldcastle, M. Shumar, C.M. Tonra. 2023. Lake-crossing behavior of migratory songbirds: Assessing potential collision risk with offshore wind on Lake Erie. Joint Annual Meeting of the American Ornithological Society and the Society of Canadian Ornithologists, London, ON, Canada.
- Rose, A.\* and C.M. Tonra. Habitat selection of overwintering White-throated Sparrow flocks in an Ohio experimental wetland ecosystem. Joint Annual Meeting of the American Ornithological Society and the Society of Canadian Ornithologists, London, ON, Canada.
- Tsuru, B.R.\* , E.A. Ames, C.M. Tonra. 2023. Post-breeding ecology in the Prothonotary Warbler: Evaluating potential trade-offs between breeding, molt, and migration. Wilson Ornithological Society Annual Meeting, Allentown, PA.
- Ciaburri\*, I.A., B. Dossman, P.P. Marra, M.R. Reudink, C.M. Tonra. 2023. Assessing breeding to nonbreeding carry-over effects in the American Redstart through feather quality. Ohio Ornithological Research Conference, Columbus, OH.
- Korpi, Z.O.\* , S Matthews, R. Jacob, M. McDermott, D Russell, M. Shieldcastle, M. Shumar, C.M. Tonra. 2023. Lake-crossing behavior of migratory songbirds: Assessing potential collision risk with offshore wind on Lake Erie. Ohio Ornithological Research Conference, Columbus, OH.
- Rose, A.\* and C.M. Tonra. Habitat selection of overwintering White-throated Sparrow flocks in an Ohio experimental wetland ecosystem. Ohio Ornithological Research Conference, Columbus, OH.
- Wright, J.\* , S.N Matthews, C. Pinchot, and C.M. Tonra. 2022. From selection to seedlings: Tracking the fate of chestnuts and acorns cached by Blue Jays (*Cyanocitta cristata*). Association of Field Ornithologists Annual Conference, Plymouth, MA.
- Tsuru, B\* and C.M. Tonra. 2022. Post-breeding ecology in the Prothonotary Warbler: Evaluating potential tradeoffs between breeding, molt, and migration phenology. Association of Field Ornithologists Annual Conference, Plymouth, MA.
- Wright, J.\* , S.N Matthews, C. Pinchot, and C.M. Tonra. 2021. Blue Jays and Oaks: A seed dispersal mutualism driving forest change in Ohio. Toledo Naturalists Association, Virtual
- Wright, J.\* , S.N Matthews, C. Pinchot, and C.M. Tonra. 2021. "Impacts of a seed dispersal mutualism on American chestnut restoration." The American Chestnut Foundation, OH chapter, Virtual
- Wright, J.\* , S.N Matthews, C. Pinchot, and C.M. Tonra. 2021. "Blue Jays and Oaks: A seed dispersal mutualism driving forest change in Ohio." OSU Extension: Ohio Woodland Stewards Program, (Virtual)
- Wright, J.\* , S.N Matthews, C. Pinchot, and C.M. Tonra. 2021. "Impacts of a seed dispersal mutualism on American chestnut restoration." Animal Behavior Society Virtual Conference
- Kingsbury J.\* , G.M. Davies, C.M. Tonra, R. Macleod. 2019. Society for Ecological Restoration (SER) Midwest and Great Lakes Chapter Meeting, Pella, IA. (April 2019). Restoring tropical grasslands for biodiversity in Beni, Bolivia: Understanding links between disturbance, habitats and birds across the cerrado-grassland gradient.
- Kingsbury J.\* , G.M. Davies, C.M. Tonra, R. Macleod. 2019. Association of Field Ornithologists/Wilson Ornithological Society Joint Annual Meeting, Cape May, NJ (October 2019). Restoring tropical grasslands for biodiversity in Beni, Bolivia: Understanding links between disturbance, habitats and birds across the cerrado-grassland gradient.
- Skinner, A.A.\* , J.R. Wright, S.N. Matthews, and C.M. Tonra. 2019. Association of Field Ornithologists/Wilson Ornithological Society Joint Annual Meeting, Cape May, NJ (October 2019). Using GPS-Tracking to Map Winter Home Ranges in an Elusive Nocturnal Insectivore: A Pilot Study.

## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

- Wright, J.R.\* , C.M. Tonra, L. Pinchot, S.N. Matthews. 2019. Ohio Bird Banding Association Annual Meeting, Waynesville OH (Aug 2019). The influence of a seed dispersal mutualism on forest change in Ohio.
- Ames, E.A.\* , C.M. Tonra, and L.P. Bulluck. 2018. American Ornithological Society Annual Meeting, Tucson, AZ (April 2018) Survival, site persistence, and movement dynamics of a non-territorial Neotropical migrant during the non-breeding period.
- Brunner, A.R.\* , P.P. Marra, and C.M. Tonra. 2018. Association of Field Ornithologists/Wilson Ornithological Society Joint Annual Meeting, Chattanooga, TN. Nonbreeding Swainson's Warblers modify their space-use strategy in response to seasonal environmental change.
- Kingsbury, J.\* , Davies, G.M., Tonra, C.M., and Macleod, R. 2018. American Ornithological Society Annual Meeting, Tucson, AZ. Threatened birds, dynamic habitats and disturbance processes: conservation ecology in one of the worlds most understudied savanna ecosystems.
- Reese J.A.\* , Tonra C.M., Viverette C., Marra P.P., and Bulluck L.P. 2018. American Ornithological Society Annual Meeting, Tucson, AZ. Using eBird data to help inform stable isotope models of migratory connectivity in the Prothonotary Warbler.
- Stein, K.A.\* , L.J. Kearns, and C.M. Tonra. 2018. American Ornithological Society Annual Meeting, Tucson, AZ. Migration strategies and nonbreeding movements of a threatened population of Black-crowned Night-Herons.
- Wright J.R.\* , Powell, L.L., and Tonra, C.M. 2018. American Ornithological Society Annual Meeting, Tucson, AZ. Automated telemetry reveals staging behavior in a declining migratory passerine.
- Ames, E.A.\* Virginia Commonwealth University Panama Study Abroad Group, Gamboa, Panama. 2018. Assessing Prothonotary Warbler Winter Movements and Habitat Use: Field Methods in the Mangroves of Panama.
- Ames, E.A.\* and C.M. Tonra. 2018. Audubon Panamá, Panama City, PA, Assessing Prothonotary Warbler Winter Movements and Habitat Use: Banding Techniques for Conservation Research.
- Ames, E.A.\* and C.M. Tonra. Kirkland Bird Club, Cleveland, OH. 2018. Linking Wintering Habitat, Phenology, and Post-fledging survival in a Migratory Warbler.
- Wright, J.R.\* , L.P. Powell, and C.M. Tonra. 2018. Kirkland Bird Club, Cleveland, OH. Migration ecology of a declining songbird, the Rusty Blackbird (*Euphagus carolinus*).
- Wright J.R.\* , Powell, L.L., and Tonra, C.M. 2017. Shorebirds in disguise: prealternate molt - migration and extended stopover of Rusty Blackbirds.
- Brunner, A.R.\* , P.P. Marra, and C.M. Tonra. 2017. American Ornithological Society/Society of Canadian Ornithologists Joint Annual Conference, East Lansing, MI. Seasonal changes in rainfall influence habitat utilization and diet in wintering Swainson's Warblers.
- Stein, K.A.\* , L.J. Kearns, and C.M. Tonra. 2017. Waterbird Society Annual Conference, Reykjavik, Iceland. Argos satellite tags reveal fall migration routes and wintering locations for a state threatened heron.
- Wright J.R.\* , Powell, L.L., and Tonra, C.M. 2017. Ohio Avian Research Conference. Shorebirds in disguise: prealternate molt - migration and extended stopover of Rusty Blackbirds.
- Stein, K.A.\* , L.J. Kearns, and C.M. Tonra. 2017. State of the Strait (Urban Bird Summit at the Detroit Zoo) Multiscale movements of a threatened population of Black-crowned Night-Herons in Lake Erie, Ohio using satellite and automated telemetry.
- Kingsbury J.\* , G.M. Davies, C.M. Tonra, R. Macleod. 2017. SER Midwest and Great Lakes Annual Chapter Meeting, Grand Rapids, MI. Tropical Grassland Restoration for Biodiversity in Beni, Bolivia.
- Ames, E.A.\* and Tonra C.M. 2016. Linking Winter Habitat, Phenology, and Post-Fledging Survival in a Migratory Songbird. 5th Quadrennial North American Ornithological Conference, Washington, DC.



## Christopher M Tonra, Ph.D.

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: www.christophertonra.com

---

- Brunner, A.\* and Tonra, C.M. 2016. Seasonal changes in habitat utilization of Swainson's Warblers in response to moisture and prey abundance. 5th Quadrennial North American Ornithological Conference, Washington, DC
- Wright, J.\*, Tonra C.M., Powell, L.L. 2016. Do migratory Rusty Blackbirds have a third stationary period in their annual cycle? Automated telemetry reveals the 'stopover' ecology of a species in decline. 5th Quadrennial North American Ornithological Conference, Washington, DC.
- Ames, E.A.\* and Tonra C.M. 2016. Linking Winter Habitat, Phenology, and Post-Fledging Survival in a Migratory Songbird. Ohio Avian Research Conference, Granville, OH.
- Brunner, A.\* and Tonra, C.M. 2016. Seasonal changes in habitat utilization of Swainson's Warblers in response to moisture and prey abundance. Ohio Avian Research Conference, Granville, OH
- Stein, K.\*, Kearns, L., and Tonra, C.M. 2016. Argos Satellite Tags Reveal Fall Migration Routes and Wintering Locations for a State Threatened Heron. Ohio Avian Research Conference, Granville, OH.
- Wright, J.\*, Tonra C.M., Powell, L.L. 2016. Do migratory Rusty Blackbirds have a third stationary period in their annual cycle? Automated telemetry reveals the 'stopover' ecology of a species in decline. Ohio Avian Research Conference, Granville, OH.

### **Co-authored Student Poster Presentations**

- Ralston, R. and C.M. Tonra. 2023. Trends in Prothonotary Warbler (*Protonotaria citrea*) arrival phenology 2012-2022. Joint Annual Meeting of the American Ornithological Society and the Society of Canadian Ornithologists, London, ON, Canada.
- Ralston, R. and C.M. Tonra. 2023. Trends in Prothonotary Warbler (*Protonotaria citrea*) arrival phenology 2012-2022. Ohio Ornithological Research Conference, Columbus, OH.
- Ciaburri, I.\*, P.P. Marra, M. Reudink, C.M. Tonra. 2022. Effects of environmental conditions on feather quality in the American Redstart. Association of Field Ornithologists Annual Conference, Plymouth, MA.
- Korpi, Z.O.\*, S.N. Matthews, M. Shumar, M. McDermott, M. Shieldcastle, and C.M. Tonra. 2022. Lake-crossing behavior of migratory songbirds: Assessing potential collision risk with offshore wind on Lake Erie. Association of Field Ornithologists Annual Conference, Plymouth, MA.
- Skinner, A.A.\*, M. Ward, J.R. Wright, I. Souza-Cole, T.J. Benson, S.N. Matthews, F. Thompson III, and C.M. Tonra. 2020. Migratory Connectivity and Ecology in the Eastern Whip-poor-will. Poster presented at: The North American Ornithological Conference; 2020 August 10-15, Virtual.
- Skinner, A.A.\*, J.R. Wright, S.N. Matthews, and C.M. Tonra. 2019. American Ornithological Society Annual Meeting, Anchorage, AK (June 2019). Using GPS-Tracking to Map Winter Home Ranges in an Elusive Nocturnal Insectivore: A Pilot Study.
- Ames, E.A.\* and C.M. Tonra. 2017. American Ornithological Society/Society of Canadian Ornithologists Joint Annual Conference, East Lansing, MI. Carry-over cascade: linking winter habitat, arrival, breeding, and post-fledging survival in a migratory songbird.
- Stein, K.A.\*, L.J. Kearns, and C.M. Tonra. 2017. American Ornithological Society/Society of Canadian Ornithologists Joint Annual Conference, East Lansing, MI. Migratory Movements and Wintering Locations of a Threatened Population of Black-crowned Night-Herons.
- Stein, K.\* and Tonra, C.M. 2016. Growth and survival of nestlings in two island populations of Black-crowned Night-Herons in southwestern Lake Erie. 5th Quadrennial North American Ornithological Conference, Washington, DC.
- Stein, K.\* and Tonra, C.M. 2016. Growth and survival of nestlings in two island populations of Black-crowned Night-Herons in southwestern Lake Erie. Waterbird Society Annual Meeting, New Bern, NC.

## **Christopher M Tonra, Ph.D.**

School of Environment and Natural Resources, The Ohio State University, 2021 Coffey Road,  
210 Kottman Hall, Columbus, OH 43210 phone: 614-292-9838 website: [www.christophertonra.com](http://www.christophertonra.com)

---

Wright, J.\*, Tonra C.M., Powell, L.L. 2016. Do migratory Rusty Blackbirds have a third stationary period in their annual cycle? Automated telemetry reveals the 'stopover' ecology of a species in decline. Midwest Migration Network State of Stopover Symposium Milwaukee, WI.

### **Professional Skills**

- Isotope mass spectrometry ● Radioimmunoassay ● Experimental endocrinology
- R, WinBUGS, JAGS, SPSS, S-Plus, MARK, SAS ● ArcGIS ● model selection
- Population Demography Analysis ● Mixed Models ● Probability Density Functions
- North American avian species identification by sight and song ● VCP point counting
- Avian banding (all species) ● Radio telemetry and transmitter attachment ● Territory mapping
- Avian blood collection ● Nest searching ● Target netting/playback surveys

### **Additional Professional Experience**

PRBO Conservation Science, Chico/Mono Lake, CA- Field Biologist (2006-2007), Research Collaborator (Oct 2004-May 2006), Nest Searcher (2003-2004), Point Counter (2002)  
Ventana Wilderness Society, Big Sur Ornithology Lab, Big Sur, CA- Research Intern (2003)  
Golondrinas de las Americas, Lee Vining, CA- Volunteer (2002, 2003)  
Las Joyas Research Station, Jalisco, Mexico- Bird Banding Volunteer (2002-2003)  
Humboldt Bay Bird Observatory, Tyee City, CA- Bird Banding Volunteer (2002-2005)  
Humboldt State University, Shorebird Roost Survey, Arcata, CA- Volunteer (2001-2002)  
Werner Archaeological Consulting, Albany, NY- Field Assistant (1997-1998)