

GUNNAR R. KRAMER

Ph.D. • National Science Foundation Postdoctoral Research Fellow
Department of Organismic and Evolutionary Biology • Museum of Comparative Zoology
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PROFESSIONAL APPOINTMENTS

National Science Foundation Postdoctoral Research Fellow

March 2022 – present

Project: Untangling the roles of genetic and regulatory mechanisms in adaptive responses to rapid climate change (award # 2109544)

Sponsor: Scott V. Edwards, Harvard University, Museum of Vertebrate Zoology, Department of Organismic and Evolutionary Biology

EDUCATION

Ph.D. University of Toledo – Toledo, Ohio (Fall 2016 – Fall 2021)

Graduate Dean's Fellow

Major: Biology

Focus: Ecology

Advisor: Henry Streby Ph.D.

Dissertation title: Migration ecology of *Vermivora* warblers.

M.S. University of Minnesota – St. Paul, Minnesota (Fall 2013 – Spring 2017)

Minnesota Cooperative Fish and Wildlife Research Unit

Major: Natural Resources Science and Management

Track: Wildlife Ecology and Management

Advisor: David Andersen Ph.D.

Thesis title: Nonbreeding and migratory ecology of golden-winged warblers and effects of landscape composition and configuration on American woodcock productivity. <http://hdl.handle.net/11299/188784>

B.S. University of Wyoming – Laramie, Wyoming (Fall 2007 – Spring 2011)

Major: Zoology, the Honors Program

Advisor: Anna Chalfoun Ph.D.

Honors thesis title: Nestling growth rates and juvenile movements of Common Nighthawks (*Chordeiles minor*) in Grand Teton National Park.

PEER REVIEWED PUBLICATIONS

26 peer-reviewed publications; **7** first-author; **3** undergraduate mentee co-authors

Google Scholar Profile: <https://goo.gl/kxFmQT>

* indicates undergraduate co-author under my mentorship

- In revision -

28. Fischer, S.E., **G.R. Kramer**, K. Granillo, and H.M. Streby. Migratory connectivity and nonbreeding sexual segregation in gray vireos.
27. Peterson S.M., H.M. Streby, **G.R. Kramer**, J.M. Fuera, and D.E. Andersen. Sex-based differences of parental care in divided broods of golden-winged warblers. In revision. *Ibis*.

- Accepted –

26. Refsnider, J.M., S.E. Carter, A. Diaz, A.C. Hulbert, **G.R. Kramer**, P. Madden, and H.M. Streby. 2022. Macro- and micro-habitat predictors of nest success and hatching survival in eastern box turtles (*Terrapene carolina carolina*) and spotted turtles (*Clemmys guttata*) in oak savanna landscapes. *Frontiers in Ecology and Evolution*. In press.

-2021-

25. Toews D.P.L., M.D. Baiz, **G.R. Kramer**, I.J. Lovette, H.M. Streby, and S.A. Taylor. 2021. Extensive historical and contemporary hybridization suggests pre-mating isolation in *Vermivora* warblers is not strong: a reply to Confer et al. *Ecology and Evolution*. <https://doi.org/10.1002/ece3.7327>.

-2020-

24. Toews D.P.L., **G.R. Kramer**, A.W. Jones, C.L. Brennan, B. Cloud, D.E. Andersen, I.J. Lovette, H.M. Streby. 2020. Genomic identification of intergeneric hybrids in New World wood-warblers (Aves: Parulidae). *Biological Journal of the Linnean Society* 13:183-191. <https://doi.org/10.1093/biolinnean/blaa085>.
23. Baiz M., **G.R. Kramer**, H.M. Streby, S.A. Taylor, I.J. Lovette, D.P.L. Toews. 2020. Genomic and plumage variation in *Vermivora* hybrids. 2020. *Auk* 137:ukaa027 <https://doi.org/10.1093/auk/ukaa027>. -cover-
22. **Kramer, G.R.**, and J.L. Mortensen. 2020. Endangered white-breasted thrashers (*Ramphocinclus brachyurus*) reject mimetic shiny cowbird (*Molothrus bonariensis*) eggs. *Wilson Journal of Ornithology* 132:104-112 <https://doi.org/10.1676/1559-4491-132.1.104>.
21. Delancy, C.D., K. Islam, **G.R. Kramer**, G.J. MacDonald, A.R. Sharp, B.M. Connare. 2020. Geolocators reveal routes, stopover sites, and nonbreeding dispersion in a population of cerulean warblers. *Animal Migration* 7:19-26. <https://doi.org/10.1515/ami-2020-0003>.
20. Qian, S.S., J.M. Refsnider, J. Moore, **G.R. Kramer**, H.M. Streby. 2020. All tests are imperfect: Accounting for false positives and false negatives using Bayesian statistics. *Heliyon* 6:E03571 <https://doi.org/10.1016/j.heliyon.2020.e03571>.

-2019-

19. **Kramer, G.R.**, K.O. Daly, H.M. Streby, and D.E. Andersen. 2019. Associations between American Woodcock seasonal productivity and landscape composition and configuration in Minnesota. Pages 107-121 in D.G. Krementz, D.E. Andersen, and T.R. Cooper, Editors. *Proceedings of the Eleventh American Woodcock Symposium*. University of Minnesota Libraries Publishing, Minneapolis, Minnesota, USA. <https://doi.org/10.24926/AWS.0115>.
18. **Kramer, G.R.**, R.K. Pagel*, K. Maley*, C. Ziegler*, D.E. Andersen, D.A. Buehler, and H.M. Streby. 2019. Say what? Observations of bivalent singing in *Vermivora* warblers. *Ecology* 101:e02881. <https://doi.org/10.1002/ecy.2881>.
17. Toews, D.P.L., S.A. Taylor, H.M. Streby, **G.R. Kramer**, and I.J. Lovette. 2019. Selection on VPS13A linked to migration in a songbird. *Proceedings of the National Academy of Sciences* 116:18272-18274 <https://doi.org/10.1073/pnas.1909186116>.
16. Refsnider, J.M., S.E. Carter, **G.R. Kramer**, A.D. Siefker, H.M. Streby. 2019. Does dietary or microhabitat specialization correlate with environmental heterogeneity in horned lizards (Phrynosoma)? *Ecology and Evolution* 9:5542-5550. <https://doi.org/10.1002/ece3.5109>. -cover-
15. **Kramer, G.R.**, S.M. Peterson, K.O. Daly, H.M. Streby, and D.E. Andersen. 2019. Left out in the rain: Comparing productivity of two associated species exposes a leak in the umbrella species concept. *Biological Conservation* 233:276-288. <https://doi.org/10.1016/j.biocon.2019.02.039>.

-2018-

14. Taff, C.C., C.R. Freeman-Gallant, H.M. Streby, **G.R. Kramer**. 2018. Geolocator deployment reduces survival, alters selection, and impacts demography in a small songbird. *PLoS ONE* 13(12): e0207783. <https://doi.org/10.1371/journal.pone.0207783>.
13. **Kramer, G.R.**, D.E. Andersen, D.A. Buehler, P.B. Wood, S.M. Peterson, J.A. Lehman, K.R. Aldinger, L.P. Bulluck, S. Harding, J.A. Jones, J.P. Loegering, C. Smalling, R. Vallender, and H.M. Streby. 2018. Population trends in *Vermivora* warblers are linked to strong migratory connectivity. *Proceedings of the National Academy of Sciences* 115:E3192-E3200 <https://doi.org/10.1073/pnas.1718985115>. – mentioned on the cover and accompanied by a *PNAS* Commentary written by Dr. Thomas Sherry highlighting the importance of this research; <https://doi.org/10.1073/pnas.1802174115>. **Winner 2021 Publication Award from The Wildlife Society.**
12. Streby, H.M., **G.R. Kramer**, S.M. Peterson, and D.E. Andersen. 2018. Evaluating outcomes of management targeting the recovery of a migratory songbird of conservation concern. *PeerJ* <https://doi.org/10.7717/peerj.4319>
11. Streby, H.M., **G.R. Kramer**, S.M. Peterson, J.A. Lehman, D.A. Buehler, and D.E. Andersen. 2018. Carefully interpreted light-level geolocator data can lead to the discovery of interesting animal behavior (Response to Lisovski et al.). *Current Biology* 28:R99-R100 <https://doi.org/10.1016/j.cub.2017.12.025>.

-2017-

10. Streby, H.M., and **G.R. Kramer**. 2017. Comment on “Mixed effects of geolocators on reproduction and survival of cerulean warblers, a canopy-dwelling, long-distance migrant”. *Condor* 119:848-851 <https://doi.org/10.1650/CONDOR-17-111.1>.
9. **Kramer, G.R.**, H.M. Streby, S.M. Peterson, J.A. Lehman, D.A. Buehler, P.B. Wood, D.J. McNeil, J.L. Larkin, D.E. Andersen. 2017. Nonbreeding isolation and population specific migration patterns among three populations of golden-winged warblers. *Condor* 119:108-121 <https://doi.org/10.1650/CONDOR-16-143.1>.

-2015-

8. Peterson, S.M., H.M. Streby, J.A. Lehman, **G.R. Kramer**, A.C. Fish, and D.E. Andersen. 2015. High-tech or field tech: High tech or field techs: radio telemetry is a cost-effective method for reducing bias in songbird nest searching. *Condor* 117:386-395 <https://doi.org/10.1650/CONDOR-14-124.1>.
7. Peterson, S.M., H.M. Streby, **G.R. Kramer**, J.A. Lehman, D.A. Buehler, and D.E. Andersen. 2015. Geolocators on a golden-winged warblers do not affect migratory ecology. *Condor* 117: 256-261 <https://doi.org/10.1650/CONDOR-14-200.1>. -cover photo by GRK-
6. Streby, H.M., T.L. McAllister, S.M. Peterson, **G.R. Kramer**, J.A. Lehman, and D.E. Andersen. 2015. Minimizing marker mass and handling time when attaching radio transmitters and geolocators to small songbirds. *Condor* 117: 249-255. <https://doi.org/10.1650/CONDOR-14-182.1>. -cover photo by GRK-
5. Streby, H.M., **G.R. Kramer**, S.M. Peterson, J.A. Lehman, D.A. Buehler, and D.E. Andersen. 2015. Tornadoic storm avoidance behavior in breeding songbirds. *Current Biology* 28:98-102 <https://doi.org/10.1016/j.cub.2014.10.079>
4. Streby, H.M., S.M. Peterson, **G.R. Kramer**, and D.E. Andersen. 2015. Post-independence fledgling ecology in a migratory songbird: implications for breeding grounds conservation. *Animal Conservation* 18:228-225. <https://doi.org/10.1111/acv.12163>.

-2014 and earlier-

3. Streby, H.M., S.M. Peterson, J.A. Lehman, **G.R. Kramer**, B.J. Vernasco, and D.E. Andersen. 2014. Do digestive contents confound body mass as a measure of relative condition in nestling songbirds? *Wildlife Society Bulletin* 38:305-310 <https://doi.org/10.1002/wsb.406>.
2. Streby, H.M., S.M. Peterson, J.A. Lehman, **G.R. Kramer**, K.J. Iknayan, and D.E. Andersen. 2013. The effects of force-fledging and premature fledging on the survival of nestling songbirds. *Ibis* 155:616-620 <https://doi.org/10.1111/ibi.12051>.
1. **Kramer, G.K.**, A.D. Chalfoun. Growth rate and relocation movements of common nighthawk (*Chordeiles minor*) nestlings in relation to age. 2012. *Wilson Journal of Ornithology* 124:793-797 <https://doi.org/10.1676/1559-4491-124.4.793>.

ADDITIONAL PUBLICATIONS

Photo Gallery

Kramer, G.R., R.K. Pagel, K. Maley, C. Ziegler, D.E. Andersen, D.A. Buehler, and H.M. Streby. Say what? Observations of bivalent singing in *Vermivora* warblers. 2020. *Bulletin of the Ecological Society of America* 101:e01627
<https://doi.org/10.1002/bes2.1627>.

Agency Reports Authored

- Streby, H.M., **G.R. Kramer**, A.L. Crary, R.K. Pagel, and S.E. Fischer. 2018. 2018 surveys of game and non-game birds at The Nature Conservancy's Kitty Todd Preserve: Final Report.
- Kramer, G.R.**, and H.M. Streby. 2018. Range-wide migratory connectivity for full life-cycle conservation of the golden-winged warbler, a climate-sensitive songbird of the highest conservation concern: final report. Research Work Order 98, U.S. Geological Survey, Minnesota Cooperative Fish and Wildlife Research Unit.
- Streby, H.M., **G.R. Kramer**, P.B. Wood, D.A. Buehler, and D.E. Andersen. 2017. Range-wide migratory connectivity for full life-cycle conservation of the golden-winged warbler, a climate-sensitive songbird of the highest conservation concern: 2016 summary report. Research Work Order 98, U.S. Geological Survey, Minnesota Cooperative Fish and Wildlife Research Unit.
- Streby, H.M., **G.R. Kramer**, S.M. Peterson, P.B. Wood, D.A. Buehler, and D.E. Andersen. 2016. Range-wide migratory connectivity for full life-cycle conservation of the golden-winged warbler, a climate-sensitive songbird of the highest conservation concern: 2015 summary report. Research Work Order 98, U.S. Geological Survey, Minnesota Cooperative Fish and Wildlife Research Unit.
- Kramer, G.R.**, H.M. Streby, S.M. Peterson, P.B. Wood, D.A. Buehler, and D.E. Andersen. 2015. Range-wide migratory connectivity for full-life cycle conservation of the golden-winged warbler, a climate-sensitive songbird of the highest conservation concern: 2014 summary report. Research Work Order 98, U.S. Geological Survey, Minnesota Cooperative Fish and Wildlife Research Unit.
- Streby, H.M., **G.R. Kramer**, S.M. Peterson, and D.E. Andersen. 2014. Range-wide migratory connectivity for full-life cycle conservation of the golden-winged warbler, a climate-sensitive songbird of the highest conservation concern: 2013 summary report. Research Work Order 98, U.S. Geological Survey, Minnesota Cooperative Fish and Wildlife Research Unit.

PUBLISHED DATASETS

- Kramer, G.R.**, S.M. Peterson, K.O. Daly, H.M. Streby, and D.E. Andersen. 2019. Data supporting the comparison of golden-winged warbler and American woodcock productivity in northern Minnesota, USA. Data Repository for the University of Minnesota, <https://doi.org/10.13020/znag-tn48>.
- Kramer, G.R.**, D.E. Andersen, D.A. Buehler, P.B. Wood, S.M. Peterson, J.A. Lehman, K.R. Aldinger, L.P. Bulluck, S. Harding, J.A. Jones, J.P. Loegering, C. Smalling, R. Vallender, and H.M. Streby. 2018. Data from range-wide study of migratory connectivity of *Vermivora* warblers. Data Repository for the University of Minnesota, <https://doi.org/10.13020/D6D97W>.

1. **Kramer, G.R.**, H.M. Streby, S.M. Peterson, J.A. Lehman, D.A. Buehler, P.B. Wood, D.J. McNeil, J.L. Larkin, and D.E. Andersen. 2016. Raw light-level data from Golden-winged Warblers breeding at three sites in North America. Data Repository for the University of Minnesota, <http://doi.org/10.13020/D6R59C>.

FELLOWSHIPS, GRANTS, AND AWARDS

U Wyoming Peak Achievement Award	2007-2011	\$ 28,000
W. R. Hotchkiss Award, Deluxe Corporation	2008-2011	\$ 10,500
U Wyoming Honors Stipend	2007-2011	\$ 4,000
L. Floyd Clarke Scholarship, U of Wyoming	2011	\$ 500
Best Student Pres., MN Chapter of The Wildlife Society	2015	\$ 75
AOU Council's Student Presentation Award; NAOC VI	2016	\$ 300
AOU Student Travel Award	2016	\$ 190
OH Avian Res. Conf. David O. Osborne Award	2017	\$ 200
Janice Lee Fenske Award Finalist	2018	\$
AOS Student Travel Award	2018	\$ 400
UToledo Grad. Student Assoc. Travel Award	2018	\$ 100
Best Student Paper, Dept. of Env.Sci., UToledo	2018	\$ 100
UToledo Graduate Dean's Fellowship	2018-2021	\$125,000
Travel Award, Dept. of Env.Sci., UToledo	2018	\$ 230
Biodiversity Working Group Grant, The Wildlife Society	2020	\$ 100
Midwest Fish & Wildlife Conference Travel Grant	2021	\$ 75
Graduate Student of the Year, North Central Section, TWS	2021	\$ 500
NSF Postdoctoral Research Fellowship in Biology	2021	\$138,000
Publication Award, The Wildlife Society	2021	\$

SELECTED PROFESSIONAL CONFERENCE PRESENTATIONS

Oral Presentations (24 total oral presentations)

16 first-author oral presentations, 3 presentation awards (1 international, 2 regional)

* indicates undergraduate co-author under my mentorship

Kramer G.R., Peterson S.M., Streby H.M., Andersen D.E. "Conservation of golden-winged warblers based on regionally derived information". 81st Midwest Fish & Wildlife Conference. St. Paul, Minnesota (held virtually), February 2021.

Kramer G.R., Andersen D.E., D.A. Buehler, P.B. Wood, S.M. Peterson, J.A. Lehman, K.R. Aldinger, L.P. Bulluck, S. Harding, J.A. Jones, J.P. Loegering, C. Smalling, R. Vallender, H.M. Streby. "Variation in space use and exposure to potential risk factors during migration are not associated with *Vermivora* warbler population trends". 27th Meeting of The Wildlife Society. Lexington, KY (held virtually), October 2020.

Kramer G.R., Andersen D.E., D.A. Buehler, P.B. Wood, S.M. Peterson, J.A. Lehman, K.R. Aldinger, L.P. Bulluck, S. Harding, J.A. Jones, J.P. Loegering, C. Smalling, R. Vallender, H.M. Streby. "Variation in space use and exposure to potential risk factors during migration are not associated with *Vermivora* warbler population trends". North American Ornithological Conference VII. San Juan, Puerto Rico (held virtually), August 2020.

- Kramer G.R.**, Andersen D.E., D.A. Buehler, P.B. Wood, S.M. Peterson, J.A. Lehman, K.R. Aldinger, L.P. Bulluck, S. Harding, J.A. Jones, J.P. Loegering, C. Smalling, R. Vallender, H.M. Streby. "Range-wide migration patterns and distribution of *Vermivora* warblers during the nonbreeding period". Ohio Avian Research Conference. Granville, Ohio, October 2017. David O. Osborne Award
- Kramer G.R.**, H.M. Streby, S.M. Peterson, J.A. Lehman, D.A. Buehler, P.B. Wood, D.J. McNeil, J.L. Larkin, D.E. Andersen. "Nonbreeding isolation and population-specific migration routes among three populations of Golden-winged Warbler. North American Ornithological Conference VI. Washington, D.C., August 2016. -*AOU Council Student Presentation Award*-
- Kramer G.R.**, H.M. Streby, S.M. Peterson, J.A. Lehman, D.A. Buehler, P.B. Wood, D.E. Andersen. "There and back again: migratory behaviors of Golden-winged Warblers discovered using geolocators". Joint meeting of the Minnesota and Wisconsin Chapters of The Wildlife Society. Duluth, Minnesota, February 2015. -*Best Graduate Student Presentation Award*-
- Kramer G.R.**, A.D. Chalfoun. "Common Nighthawk nestling growth rates and movements in Grand Teton National Park". University of Wyoming Undergraduate Research Day, Laramie, Wyoming, April 2011.

Poster Presentations (* indicates undergraduate student)

- Pagel R.K.* (presenter), **G.R. Kramer**, C.L. Ziegler, K. Maley, H.M. Streby. "Say what? Inter-annual, inter-specific song switching in Golden- and Blue-winged Warblers". American Ornithology 2017. East Lansing, Michigan, August 2017.
- Streby H.M., S.M. Peterson, **G.R. Kramer**, D.E. Andersen. "Post-independence fledgling ecology in Golden-winged Warblers: implications for breeding-grounds conservation and management. Midwest Fish and Wildlife Conference. Kansas City, Kansas, January 2014.
- Kramer G.R.**, A.D. Chalfoun. "Factors associated with the relocation of dependent nestlings in Common Nighthawks". The Wildlife Society Annual Meeting. Waikoloa, Hawaii, November 2011.

INVITED PRESENTATIONS FOR PROFESSIONALS AND/OR THE PUBLIC (SELECTED)

- Kramer G.R.** "Migratory connectivity of *Vermivora* warblers: why it matters where you winter". Adult Learning Series, Metroparks Toledo, Toledo, Ohio. March 2018.
- Kramer G.R.** "Migratory connectivity of *Vermivora* warblers: why it matters where you winter". Science Seminar Series, Department of Biological Sciences, Arkansas State University, Jonesboro, Arkansas. February 2018.
- Kramer G.R.**, D.E. Andersen, H.M. Streby, S.M. Peterson, K.O. Daly. "Golden-winged Warbler & American Woodcock Full Life-Cycle Biology and Management". U.S. Fish and Wildlife Service – Region 3 Headquarters, Bloomington, Minnesota. June 2017.
- Kramer G.R.**, H.M. Streby, S.M. Peterson, J.A. Lehman, D.A. Buehler, P.B. Wood, D.E. Andersen. "There and back again: migratory behaviors of Golden-winged Warblers uncovered using geolocators". FNRM 8107 Graduate Student Seminar Series, University of Minnesota, St. Paul, Minnesota, December 2014.

TEACHING EXPERIENCE

Teaching Assistant Biodiversity (U Toledo EEES 2160), Spring 2017

- Independent lab (no associated lecture)
- Sole instructor for two sections (24 students/section)
- Responsible for overhauling course content, materials, and lab activities
- Average student evaluation score: **4.8/5.0**

Invited Lecturer Conservation Biology (U Toledo) Spring 2018

Geocator Analysis Workshop Leader, U Toledo Fall 2018

Graduate Students Mentored

R. Kyle Pagel, MS, University of Toledo, 2015-2019 (now in permanent position at California Department of Fish and Wildlife)

Silas Fischer, MS, PhD, University of Toledo 2017-present

Undergraduate Students Mentored

Joanna Saad – Spring 2017 – present; developed project on geographic variation in plumage characteristics of *Vermivora* warblers

Christopher Roemer – Spring 2018 – 2020; U Toledo; developed project assessing stress in migratory birds using microscopy to quantify heterophil/lymphocyte ratios in avian blood samples

SUCCEED mentor to multiple undergraduate and graduate LGBTQIA+ students per year: 2018-2020

Provided Training (* indicates students that have gone onto graduate school or permanent positions in the field of natural resources):

R. Kyle Pagel*	Katelyn Maley	Shaun Wallace	Holland Youngman
Silas Fischer*	Annie Bracey	Kyle Aldinger	Patrick Ruhl
Patricia Rodrigues*	Nina Hill	Eliot Berz*	Claire Nemes
Kristie Stein*	Elijah Davis	Nick Moy	Henry Stevens*
Cassandra Ziegler*	Jacob Wessels*	Jenna Dodson	Allie Pesano*
Ashley Hannah	Amélie Roberto-Charron		Jessie Williamson
Jen Chancey	D.J. McNeil*	Andrew Rehman	Danner Bradshaw

ADDITIONAL RESEARCH EXPERIENCE

Field research assistant on 11 different projects for researchers from University of Toledo, University of Minnesota, Tufts University, Smithsonian Institution, Ned Smith Center for Nature and Art, University of Wyoming. Extensive experience capturing and handling wild birds.

SERVICE AND OUTREACH

Diversity and Inclusion

Creator and organizer of the College of Natural Sciences and Mathematics “Peer-to-Peer Graduate Student Mentoring Network” at the University of Toledo, 2018-2021

Creator and organizer of the University of Toledo “Diverse Perspectives” reading list, 2020-2021

Co-creator and organizer Graduate Dean’s Fellows and Scholars UToledo Diversity and Inclusion Virtual Roundtables, 2021-2021

Member of UT College of Natural Sciences and Mathematics Diversity & Inclusion Committee, 2018 – 2021 (including helping develop the first Diversity and Inclusion Strategic Plan for the college)

Member of the UToledo LGBTQIA+ Advisory Board, liaison to NW Ohio LGBT Business Coalition, 2018-2021

Wildlife Science Instructor for White Earth Academy of Math and Science, Gaawaabaabiganikaag (White Earth Indian Reservation)

Outreach

Volunteer Bird Banding Demonstrations for:

Rice Lake National Wildlife Refuge (MN) Family Fun Day, 2012 – 2019

Penn State University – Schuylkill Haven (PA) Ecology students, general public, 2012

Matagorda County (TX) grade-school students, 2013

Local St. Lucian children, 2013

Invited Guest Speaker Metropolitan Montessori School (3rd grade), New York, NY. Fall 2016, Fall 2017; J. J. Hill Montessori Magnet School (3rd and 4th grade), St. Paul, MN. Fall 2019.

Volunteering

Volunteer Field Assistant for Tom Cooper, Ph.D., USFWS, Bloomington, Minnesota: Trapped and attached GPS-satellite transmitters to American Woodcock.

Volunteer Field Assistant for Jeanine Refsnider, Ph.D., University of Toledo, Toledo, Ohio: Ecology of Phrynosoma lizards across an altitudinal gradient in Utah.

Volunteer Field Assistant for David Fronczak M.S., USFWS, Bloomington, Minnesota: Conducted Sandhill Crane productivity surveys at stopover sites in Indiana.

Volunteer Field Assistant for David Wolfson M.S., University of Minnesota, St. Paul, Minnesota: Surveyed wetlands for presence of breeding Sandhill Cranes in northern, and north-western Minnesota.

Volunteer Field Assistant for Nina Hill M.S., University of Minnesota, St. Paul, Minnesota: Conducted vegetation surveys in wetlands in northwestern Minnesota as part of a secretive marsh bird study.

Volunteer Game Check Attendant for Wyoming Department of Game and Fish

Hiring Committee Member for the University Toledo College of Graduate Studies, 2020

Professional Service

Manuscripts reviewed (n = 15) for: *Avian Ecology and Conservation*, *BMC Zoology*, *Ecography*, *Journal of Field Ornithology* (2), *Journal of Raptor Research* (4), *PeerJ*, *Proceedings of the 11th American Woodcock Symposium*, *Scientific Reports*, *Wilson Journal of Ornithology* (4).

Grant reviewer for: Biological and Biological Sciences Research Council (BBSRC; UK Research and Innovation); Legislative-Citizen Commission on Minnesota Resources (LCCMR; MN, USA)

Review Committee Member for the NOGLSTP (AAAS LGBTQIA+ STEM association) Undergraduate Out to Innovate Scholarship, 2018

Judge for the “3 Minute Thesis” final competition, University of Toledo, 2018

PROFESSIONAL MEMBERSHIPS

American Ornithological Society
Association of Field Ornithologists
National Organization of Gay and Lesbian Scientists and Technical Professionals
Raptor Research Foundation
Society for the Study of Evolution
The Wildlife Society
Wilson Ornithological Society