

Jessica Gorzo

DATA SCIENTIST

Cellular Tracking Technologies

she/her | avianecologist.com | dendroica | gorzo | setophaga

Recent Experience

Conservation Science Global, Inc.

RESEARCH ASSOCIATE

- Data wrangling and ecological analysis

Remote

Mar. 2024 - Present

Cellular Tracking Technologies LLC

DATA SCIENTIST

- Develop methodology to estimate locations from radio and Bluetooth signals from wildlife telemetry devices
- Manage data pipelines and processes that deliver and display data via web interfaces

Rio Grande, NJ

Jul. 2020 - Present

On the Wing Scientific Consulting LLC

CO-FOUNDER

- Data science consulting projects including spatio-temporal modeling
- Create tools for improving workflows

Remote

Jul. 2018 - Present

Natural Resources Research Institute

RESEARCHER

- Landscape Ecologist

Duluth, MN

Aug. 2016 - Jun. 2020

Education

Virginia Tech

B.S. BIOLOGICAL SCIENCES

Blacksburg, VA

2004-08

Clemson University

M.S. WILDLIFE & FISHERIES BIOLOGY

Clemson, SC

2009-11

University of Wisconsin

PH.D. WILDLIFE ECOLOGY

Madison, WI

2012-16

Thesis & Dissertation

Gorzo, J. M. (2016). *Avian Response to Weather in the Central US Grasslands* [PhD thesis]. The University of Wisconsin-Madison.

Gorzo, J. M. (2012). *Avian communities and landscape characteristics of golf courses within the Beaufort County sea island complex* [Master's thesis]. Clemson University.

Peer-Reviewed Publications

Gorzo, J. M., Pidgeon, A. M., Thogmartin, W. E., Allstadt, A. J., Radeloff, V. C., Heglund, P. J., & Vavrus, S. J. (2016). Using the North American Breeding Bird Survey to assess broad-scale response of the continent's most imperiled avian community, grassland birds, to weather variability. *The Condor: Ornithological Applications*, 118(3), 502–512.

Schilke, P. R., Bartrons, M., Gorzo, J. M., Vander Zanden, M. J., Gratton, C., Howe, R. W., & Pidgeon, A. M. (2020). Modeling a cross-ecosystem subsidy: Forest songbird response to emergent aquatic insects. *Landscape Ecology*, 35, 1587–1604.

McIntyre, N., Liu, G., Gorzo, J. M., Wright, C. K., Guntenspergen, G. R., & Schwartz, F. (2019). Simulating the effects of climate variability on waterbodies and wetland-dependent birds in the Prairie Pothole Region. *Ecosphere*, 10(4), e02711.

Hamilton, C. M., Bateman, B. L., Gorzo, J. M., Reid, B., Thogmartin, W. E., Peery, M. Z., Heglund, P. J., Radeloff, V. C., & Pidgeon, A. M. (2018). Slow and steady wins the race? Future climate and land use change leaves the imperiled Blanding's turtle (*Emydoidea blandingii*) behind. *Biological Conservation*, 222, 75–85.

Latimer, C. E., Graves, R., Pidgeon, A. M., Gorzo, J. M., Henschell, M. M., Schilke, P. R., Hobi, M. L., Olah, A., Kennedy, C. M., Zuckerberg, B., et al. (2022). Rising novelty and homogenization of breeding bird communities in the US.

Simonetti, J., Chou, A., Dowd, J., Gorzo, J., Grimm, C., Harold, M., Hubbard, R., Kuether, T., Loyd, R., Nipper, B., et al. (2008). Minor Planet Observations [841 Martin Observatory, Blacksburg]. *Minor Planet Circulars*, 62871, 9.

Conference Presentations

- Gorzo, J. M., & Wright, C. K. (2018). Mallard Distribution and Wetland Network Modularity in the Prairie Pothole Region (PPR). *IALE-NA, T02*, Terrestrial-aquatic ecosystem interactions.
- Gorzo, J. M. (2017). Waterfowl response to weather and land cover in the prairie potholes. *Proceedings of the Ninety-Eighth Annual Meeting*, 922. <https://doi.org/10.1676/1559-4491-129.4.911>
- Gorzo, J. M., Pidgeon, A., Allstadt, A., Thogmartin, W., Vavrus, S., & Heglund, P. (2016). Land cover and weather drivers of avian site fidelity. *Proceedings of the Society for Conservation Biology*.
- Wright, C. K., & Gorzo, J. M. (2018). For mallard ducks, the network is the habitat. *AGU Fall Meeting Abstracts, 2018*, H21L-1826.
- Gorzo, J. M., Pidgeon, A. M., Thogmartin, W., Allstadt, A., & Radeloff, V. (2015). Grassland bird response to weather in the badlands and prairies. *Meeting of the American Ornithologists' Union/Cooper Society*.
- Gorzo, J. M. (2014). Avian population response to extreme weather events. *Nelson Earth Day Conference*.
- Gorzo, J. M., & Jodice, P. G. R. (2011). The breeding bird community of coastal golf courses in Beaufort County, South Carolina. *Meeting of the American Ornithologists' Union*.
- Bateman, B., Gorzo, J. M., Pidgeon, A., Radeloff, V., Akcakaya, R., Flather, C., Albright, T., Vavrus, S., Thogmartin, W., & Heglund, P. (2013). Use of multiple data sources in identifying drivers of abundance in an irruptive species, the dickcissel. *Meeting of the American Ornithologists' Union/Cooper Ornithological Society*.
- Allstadt, A. J., Gorzo, J. M., Bateman, B. L., Heglund, P. J., Pidgeon, A. M., Thogmartin, W., Vavrus, S. J., & Radeloff, V. (2016). Effects of weather on the abundance and distribution on populations of 103 breeding bird species across the United States. *AGU Fall Meeting Abstracts, 2016*, GC11D-1181.

Technical Reports

- Noe, R., Locke, C., Host, G., Gorzo, J., Johnson, L., Lonsdorf, E., Grinde, A., Joyce, M., Bednar, J., Dumke, J., et al. (2021). *Measuring what matters: Assessing the full suite of benefits of OHF investments*.
- Johnson-Bice, S., Gorzo, J. M., Kovalenko, K., Brown, T., & Host, G. (2020). *Predicting Potential Beaver Dam Sites on Lake Superior's North Shore*. Natural Resources Research Institute.

Contributions

StellaR: <http://www.r-gis.net/stellar/>

Updated code for Supplement 1. R Script in 2016 for the publication: Jackson, M. M., Turner, M. G., Pearson, S. M., & Ives, A. R. (2012). Seeing the forest and the trees: multilevel models reveal both species and community patterns. *Ecosphere*, 3(9), 1-16. https://figshare.com/articles/dataset/Supplement_1_R_script_and_input_data_file_for_creating_multilevel_models_using_the_forest_herb_data_set_described_in_the_main_text_/3563784?file=5637069

Contributed "Raptors and songbirds" (8.4.5.1) pp.565-566 in Jodice, P. G. R., Tavano, J., Mackin, W., & Michel, J. (2013). South Atlantic information resources: data search and literature synthesis. US Department of the Interior, Bureau of Ocean Energy Management, regulation, and enforcement, Gulf of Mexico OCS region, 475, 587

Teaching

SELECTED INVITED SEMINARS

- Gorzo, J.M. "Career Perspective: From Wildlife to Data Science." Stockton University (remote) 4/18/24
- Gorzo, J.M. "Networks and Connectivity in Landscape Ecology" University of Minnesota-Duluth, 2020
- Gorzo, J.M. "Introduction to Birding & Community Science" University of Wisconsin-Stevens Point, 2016

Outreach, Service & Fundraising

- Birding field guide (paid and volunteer) for various festivals (2015-2023)
- World Series of Birding: Participant in Carbon Footprint Challenge (2015, 2021)