

Jessica Gorzo

DATA SCIENTIST

Cellular Tracking Technologies

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

Recent Experience

Cellular Tracking Technologies

DATA SCIENTIST

Rio Grande, NJ

Jul. 2020 - Present

- 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

On the Wing Scientific Consulting LLC

CO-FOUNDER

Remote

Jul. 2018 - Present

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

Natural Resources Research Institute

RESEARCHER

Duluth, MN

Aug. 2016 - Jun. 2020

- Landscape Ecologist

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. *bioRxiv*, 2022–2009.

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. (2017a). 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. (2017b). 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

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)