Renata M. Diaz

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https://diazrenata.github.io/home/

School of Biology and Ecology, University of Maine, Orono, ME

Education

PhD – Interdisciplinary Ecology and Wildlife Ecology and Conservation University of Florida Advisor: S. K. Morgan Ernest

Dissertation: Of rodents and randomness: macroecological approaches to community structure

A.B – Ecology and Evolutionary Biology, high honors Certificate in Environmental Studies

Princeton University

2015

2022

Senior thesis: Herbivore-mediated effects of small mammals on the spatial distribution of savanna trees. Awarded Leslie Kilham Johnson Memorial Award for an outstanding thesis in tropical ecology.

Funding

NSF Postdoctoral Research Fellowship in Biology

2022-2024

NSF Graduate Research Fellowship

2017-2022

UF School of Natural Resources & Environment Travel Award

2021

Publications

R. M. Diaz and S. K. M. Ernest (2022). Maintenance of community function through compensation breaks down over time in a desert rodent community. Ecology 103(7): e3709. https://doi.org/10.1002/ ecv.3709

R. M. Diaz, H. Ye, S. K. M. Ernest (2021). Empirical abundance distributions are more uneven than expected given their statistical baseline. *Ecology Letters*, 2021;00:1-15. https://doi.org/10.1111/ele.13820

E. M. Christensen, G. M. Yenni, H. Ye, J. L. Simonis, E. K. Bledsoe, R. M. Diaz, S. D. Taylor, E. P. White, S. K. M. Ernest (2019), portalr: an R package for summarizing and using the Portal Project Data. Journal of Open Source Software, 4(33), 1098, https://doi.org/10.21105/joss.01098

G. M. Yenni, E. M. Christensen, E. K. Bledsoe, S. R. Supp, R. M. Diaz, E. P. White, S. K. M. Ernest (2019). Developing a modern data workflow for regularly updated data. PLoS Biol 17(1): e3000125. https://doi.org/10.1371/journal.pbio.3000125

In prep/in review

R. M. Diaz and S. K. M. Ernest. Shifts in the individual size distribution decouple the dynamics of abundance, biomass, and energy use in North American breeding bird communities. In prep.

Software and data products

S. K. M. Ernest, et al. (2018). The Portal Project: a long-term study of a Chihuahuan desert ecosystem. bioRxiv 332783, https://doi.org/10.1101/332783

R packages

feasiblesads Author, maintainer https://github.com/diazrenata/feasiblesads https://doi.org/10.5281/zenodo.4710750

MATSS
https://weecology.github.io/MATSS/
Author
https://doi.org/10.5281/zenodo.3333008

LDATS
Author

https://weecology.github.io/LDATS/
https://doi.org/10.5281/zenodo.3286617

portalr https://weecology.github.io/portalr/
Author https://doi.org/10.5281/zenodo.1429290

Presentations

R. M. Diaz* and S. K. M. Ernest. Energetic compensation breaks down over time in a desert rodent community. ESA Annual Meeting. *presenting author August 2021

Shifts in energetic compensation over time in a desert rodent community.

April 2021
UF SNRE Student Research Symposium.

The Portal Project – data workflow for living data. UF Open Data Showcase.

October 2019

Teaching experience

TA, Environmental Science Lab.

Developed & delivered field and data analysis lab exercises.

University of Florida
Fall 2020

Co-instructor, Introduction to R Workshop.

University of Florida Carpentries Club
2020-present

Writing Center Fellow, Princeton Writing Program

Princeton University
Provided one-on-one writing assistance to undergraduate & graduate students.

2012-2015

Research experience

Research Assistant, The Portal Project, Portal, AZ

Field censuses of desert rodent and plant communities.

University of Florida
2017-present

GIS Intern, Global Change Ecology Lab, St. Louis, MO
Data compilation and analysis of threats to rare plants in the United States.

Missouri Botanic Garden
2017

Intern, Ecology of Bird Loss Project, Saipan, CNMI

Field surveys of tropical forest trees, seed rain, and frugivory observations.

Iowa State University
2016

Research Assistant, Staver Lab, New Haven, CT and field sites

Yale University
Management of greenhouse experiments, field work, and image analysis.

2015-2016

Training and workshops

Certified Data Carpentry Instructor, via The Carpentries 2021

Certified Ally Skills Workshop leader, via FrameShift Consulting 2019

Data-driven Ecological Synthesis Intensive course participant, University of Montreal 2019

References

S. K. Morgan Ernest Associate Professor, Dept. of Wildlife Ecology and Conservation University of Florida skmorgane@ufl.edu 352-294-2082

Ethan White Associate Professor, Dept. of Wildlife Ecology and Conservation University of Florida ethanwhite@ufl.edu 352-294-2081

Hao Ye Reproducibility Librarian, Health Science Center Libraries. University of Florida haoye@ufl.edu 352-273-2636