Renata M. Diaz

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School of Natural Resources & Environment, University of Florida, Gainesville, FL

Education

PhD – Interdisciplinary Ecology and Wildlife Ecology and Conservation — University of Florida
Advisor: S. K. Morgan Ernest — Expected 2022
Dissertation: Of rodents and randomness: macroecological approaches to community structure

A.B – Ecology and Evolutionary Biology, high honors — Princeton University
Certificate in Environmental Studies — 2015
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 Graduate Research Fellowship 2017-2022

UF School of Natural Resources & Environment Travel Award 2021

Publications

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. Maintenance of community function through compensation breaks down over time in a desert rodent community. In review; preprint: https://doi.org/10.1101/2021.10.01.462799.

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

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

LDATS https://weecology.github.io/LDATS/
Author 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. — University of Florida
Developed & delivered field and data analysis lab exercises. — Fall 2020

Co-instructor, Introduction to R Workshop. — University of Florida Carpentries Club
September 2020, September 2021

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 — University of Florida
Field censuses of desert rodent and plant communities. — 2017-present

GIS Intern, Global Change Ecology Lab, St. Louis, MO — Missouri Botanic Garden
Data compilation and analysis of threats to rare plants in the United States. — 2017

Intern, Ecology of Bird Loss Project, Saipan, CNMI — Iowa State University
Field surveys of tropical forest trees, seed rain, and frugivory observations. — 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