
Data Scientist & Scientific Communicator

Self-starting and enthusiastic communicator with 7+ years of experience conducting ecological research in a variety of coding languages, designing **quality assurance and control workflows**, and presenting results in a range of written and oral formats. Effective at carrying out individual work while also excelling in collaborative team settings. A bright, adaptable worker who can **successfully lead or assist** on dynamic and ongoing projects.

Skills

R · Git · Quarto · Microsoft Office · R Shiny · **R Package Development** · Data Visualization · Team Management · Zoom
Public Speaking · WordPress · Survey Creation · Text Mining · Spatial Data Wrangling · **Experimental Design** · Methods Development
SQL · Climate Data Management · **Scientific Writing** · Science Communication · Species Distribution Modeling · **Teaching**
Field Identification of Insects, Plants, and Birds of the American Midwest, Southeast, and Pacific Northwest

Professional Experience

Data Analyst | LTER Network Office, Santa Barbara CA | (Feb. 2022 – Present)

- Taught workshops on the `tidyverse` R packages and reproducible coding with Git and GitHub
- Authored the R package `lterpalettfinder` and wrote a companion R Shiny app to demonstrate it
- Collaborated with external working group participants to meet their data synthesis-related needs
- Wrangled spatial data from a variety of sources (including lithology, land cover, etc.)

Data Scientist & Network Administrator | Herbivory Variability Network, Lansing MI | (Aug. 2021 – Feb. 2022)

- Coded a quality assurance pipeline in R for a database collected by 200 collaborators based in more than 30 countries
- Designed a data management plan to standardize post-collection data handling and distribution across the Network
- Revised the set of protocols used to train collaborators before and during data collection
- Created an R Shiny app for preliminary quality assurance and control followed by data submission

Biology Teaching Assistant | University of Georgia, Athens GA | (Aug. 2020 – May 2021)

- Facilitated students in honing their scientific observation, experimental design, and writing skills
- Designed instructional content for 25 weeks of labs that emphasized critical thinking skills across two semesters
- Provided thorough and constructive written feedback on lab reports as well as on quiz-style assignments
- Aided students in identifying their first independent research question and implementing the subsequent experiment

Grassland Restoration Ecologist | Iowa State University, Ames IA | (May 2016 – May 2019)

- Surveyed butterflies, wild bees, and flowering plants in remnant and restored prairie
 - Performed quality assurance and control (QA/QC) on field-collected data collected by multiple observers
 - Interviewed, hired, and managed teams of research technicians for multiple field seasons
 - Wrote protocols for field data collection and database management
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Selected Publications

Gaynor, K. et al., **Ten Simple Rules to Cultivate Belonging in Collaborative Data Science Research Teams.** *[In review]*

Lyon, N.J., Stein, D.S., Debinski, D.M., Miller, J.R., Schact, W.H. 2021. **Responses of Flowering Plant and Butterfly Communities to Experimental Herbicide and Seeding Treatments for Native Grassland Restoration.** *Ecological Restoration* 3.

Coon, J.J., Lyon, N.J., Raynor, E.J., Debinski, D.M., Miller, J.R., Schact, W.H. 2021. **Using Adaptive Management to Restore Grasslands Invaded by Tall Fescue (*Schedonorus arundinaceus*).** *Rangeland Ecology and Management* 76.

Lyon, N.J., Debinski, D.M., Rangwala, I. 2019. **Evaluating the Utility of Species Distribution Models in Informing Climate Change-Resilient Grassland Restoration Strategy.** *Frontiers in Ecology and Evolutionary Biology* 7.

Education

Master of Science, Ecology and Evolutionary Biology – Iowa State University, Ames IA

Bachelor of Science, Biology – University of Puget Sound, Tacoma WA