Nicholas J. Lyon

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 and big-picture project management. A bright, adaptable worker who can successfully lead or assist on dynamic and ongoing projects.

Skills

 $R \cdot \textbf{Git} \cdot \text{Quarto} \cdot \text{Microsoft Office} \cdot \text{R Shiny} \cdot \textbf{R Package Development} \cdot \text{Data Visualization} \cdot \text{Team Management} \cdot \text{Zoom} \\ \textbf{Public Speaking} \cdot \text{WordPress} \cdot \text{Survey Creation} \cdot \text{Text Mining} \cdot \text{Spatial Data Wrangling} \cdot \textbf{Experimental Design} \cdot \text{Methods Development} \\ \text{SQL} \cdot \text{Climate Data Management} \cdot \textbf{Scientific Writing} \cdot \text{Science Communication} \cdot \text{Species Distribution Modeling} \cdot \textbf{Teaching} \\ \text{Generalized Linear Mixed Effect Models} \cdot \textbf{Workshop Development} \cdot \text{GitHub} \cdot \text{Project Management} \cdot \text{R Package Creation} \\ \\ \text{Survey Management} \cdot \text{R Package Creation} \cdot \text{R Package Creation} \cdot \text{R Package Creation} \\ \text{R Package Creation} \cdot \text{R Package Creation} \cdot \text{R Package Creation} \\ \text{R Package Creat$

Professional Experience

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

- Worked with over 100 researchers spanning 12 working groups to meet their data-related and analytical needs
- Taught workshops on collaboration with Git and GitHub, the `tidyverse` in R, and making R Shiny apps
- Authored the R package `lterpalettefinder` and wrote a companion R Shiny app to allow non-R users to explore it
- Converted SQL code into equivalent scripts in R
- Analyzed 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

Selected Products

Lyon N.J. (2023). supportR: Support Functions for Wrangling and Visualization. R package version 1.0.0.

Lyon N.J. (2022). <u>Iterpalettefinder</u>: Extract Color Palettes from Photos and Pick Official LTER Palettes. R package version 1.1.0.

Gaynor, K. et al. (2022) **Ten Simple Rules to Cultivate Belonging in Collaborative Data Science Research Teams**. PLOS Computational Biology

Lyon, N.J. et al. (2022) Sharing Science with R Shiny Apps. LTER All Scientists' Meeting, Monterey, CA

Education

Master of Science, Ecology and Evolutionary Biology – Iowa State University, Ames IA Bachelor of Science, Biology – University of Puget Sound, Tacoma WA