# Nicholas J. Lyon

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## 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)

- Worked with 91 members of 5 LTER working groups to meet their data synthesis-related needs
- Taught workshops on the `tidyverse` R packages and reproducible coding with Git and GitHub
- Authored the R package `lterpalettefinder` and wrote a companion R Shiny app to demonstrate it
- 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

## 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