VERMONT CENTER FOR ECOSTUDIES
Uniting People and Science for Conservation

JOB DESCRIPTION

Title: Data Manager

Reports to: Director of Conservation Science

Terms: Full-time / Exempt / Eligible for Benefits

Location: VCE office at 20 Palmer Court in White River Junction, VT

Organizational Profile

The Vermont Center for Ecostudies (VCE) advances wildlife conservation in the northeastern US and across the Americas through scientific research and community engagement. Our work involves researching and monitoring biodiversity in a variety of ecosystems and delivering results to inform management and policy decisions. We engage thousands of volunteers on a wide range of projects through data collection and monitoring.

At VCE, we believe that kindness and collaboration are integral to effective conservation science. Our staff is committed to creating a workplace culture that respects and celebrates diversity and values the wellbeing of all employees. We accomplish this by fostering inclusivity and offering flexibility within the workday to encourage a healthy work-life balance.

Position Description

The Data Manager supports the data processing and stewardship needs of VCE's science team. They work closely with staff scientists to develop systems for collecting, organizing, storing, retrieving, and analyzing ecological data. They are also responsible for data screening and transformation to ensure accuracy and utility. This involves converting, cleaning, and structuring data into formats that can be analyzed to support conservation decisions. Some projects may call for a limited amount of data entry. In addition, the Data Manager uses creative, analytical approaches to develop charts, dashboards, and other data products. With support from the Director of Conservation Science, the Data Manager collaborates with VCE partners to advance joint, data-driven initiatives.

Primary Responsibilities

- Work closely with staff scientists to understand the specific data management and exploratory analysis needs for their projects.
- Collaboratively design and maintain ecological research and monitoring databases.
- Handle large complex datasets, including: data ingestion, cleaning, formatting, extraction, exploratory analysis, and reporting.
- Develop data management tools and procedures that can be adapted for a variety of datasets, including systems for ensuring data security and integrity.
- Determine limitations in data reliability and usability.
- Design and execute computer code to enhance use of software and applications.
- Monitor and evaluate data management methods to identify opportunities for improvement.

- Support others in the daily use of databases and data systems.
- Troubleshoot data-related problems.
- Prepare metadata files for complex datasets.
- Collaborate with staff scientists and data consumers to ensure that data are used effectively.
- Assist in the development of data-rich tools and products such as dashboards, charts,story maps, and reports.
- Provide data management support to collaborators in joint projects with VCE.
- Implement FAIR and open data principles for scientific data management and stewardship.
- Work with science staff to ensure that all data are adequately backed up.
- Work with communications staff to ensure that website updates do not compromise datasets or data delivery.
- Assist with other duties as assigned, including participation in staff committees and events.

Qualifications

- B.S. in computer science, biology, or similar field.
- At least one year of professional experience working with large datasets
- A demonstrated enthusiasm for ecology, data management, and programming
- Strong organizational skills, including ability to complete multiple tasks with multiple deadlines
- Ability to work well independently and as part of a team
- Strong verbal and written communication skills
- An analytical mindset with problem-solving skills
- Data entry, cleaning, and screening skills, including focus, efficiency, and accuracy
- Familiarity with version control (i.e., Github) and software repository management
- Experience with exploratory data analysis
- Proficiency with Microsoft Office and Google Apps
- Experience creating databases in Postgres, MySQL or others
- Experience in GIS
- Willingness to contribute skills and talents to projects and initiatives beyond the stated job description
- Preferred- proficiency with one or more programming languages (e.g., R, Python, Javascript)
- Preferred - experience with OpenRefine, Tableau and other data software.
- Preferred - familiarity with Biodiversity Information Standards, Darwin Core, open data standards, and FAIR principles and practices
- Preferred - experience developing scripts and code to analyze and visualize environmental data
- Preferred- familiarity with software repositories (e.g. GitHub)