CONSERVATION
B I O L O G Y
I N S T I T U T E

<u>TITLE</u>: Spatial Data Manager
<u>LOCATION</u>: Corvallis, Oregon

Position Overview

The [Conservation Biology Institute](#) (CBI) is a growing non-profit organization, dedicated to providing scientific and technical expertise to support the conservation and recovery of biological diversity. The spatial data manager will be responsible for coordination and maintenance of all spatial data for the organization, which relies heavily on GIS data for nearly all projects. This includes managing a large collection of project-related data internal to the organization as well as curating a large and growing spatial data library as part of our online Data Basin platform (databasin.org). Working in a team environment, the spatial data manager will lead the development and implementation of geographic data management policies and procedures for the organization (e.g., metadata standards, file management, and data QA/QC) and support other science and technical staff in data management and coordination.

This position requires someone who is highly detail-oriented and passionate about geospatial data and documentation. The Conservation Biology Institute is looking for someone who will demonstrate considerable initiative in understanding how data are created, processed, and how they are best organized and archived. The terms "data librarian", "data archaeologist", and "herding cats" should have special meaning to you.

Description of Duties

Internal Data Management (60%)
- Develop new strategies and carry out established spatial data and metadata handling procedures for all CBI projects
- Manage version control of pertinent datasets; maintain archival system and reliable backups; organize and archive data from legacy projects
- Develop and manage master databases of spatial data (e.g., GDB, NetCDF, shp, img, etc.) and associated files for CBI projects
- Work with staff to provide internal data access mechanisms (e.g., ArcSDE technology, THREDDS, OpenDAP, etc.) for local and remote staff
- Assist staff in preparing, managing, documenting, formatting, and distributing spatial data and metadata to project clients and stakeholders

Online Platform (Data Basin) Data Management (30%)

• Become familiar with Data Basin technology and develop a process for reviewing content
• Work with the Data Basin team to help improve data management and QA/QC in the system
• Provide leadership and guidance for updating metadata, datasets, and map services to ensure high quality and currency of spatial information
• Provide procedures and oversight of interns to identify, acquire, and upload new datasets in collaboration with other CBI staff
• Provide documentation of developed standards and assistance to project staff

Other (10%)

• Maintain close working relationship with staff, including those at remote locations
• Provide consultation and technical assistance to project staff and Data Basin stakeholders
• Train staff on data management procedures (data documentation, QA/QC procedures, versioning, etc.)
• Attend and participate in regular staff meetings

Required Qualifications and Experience

Master's degree in Information Science, GIS, related field, or 4 years or more of related experience.

• Familiarity with a variety of spatial data formats (e.g., ArcGIS raster and vector data, NetCDF)
• Understanding of database concepts and software (e.g., ArcSDE, PostgreSQL)
• Knowledge of spatial data management, GIS, and data processing (ArcGIS 10+ pref.)
• Working knowledge of scripting languages (esp. Python, SQL, and general shell scripting)
• Ability to communicate effectively and work in a team successfully
• Knowledge of word processing, spreadsheet, and presentation software (e.g., Microsoft Office)

Preferred Experience

• Track record of successful data management system implementation
• Experience designing and implementing ESRI Enterprise ArcSDE geodatabases
• Experience applying metadata standards (esp. ISO 19115, FGDC)
• Experience with version control software (esp. git and mercurial)
• Understanding of OS X, Windows, and esp. LINUX operating environments
• Working knowledge of ArcGIS ModelBuilder

Position Type, Salary, and Benefits

This is a full-time position. Normal working hours are Monday through Friday, 8:00 am to 5:00 pm, but flexible working hours are acceptable provided they do not interfere with operations. Salary will be commensurate with qualifications and experience. Benefits include:

- Medical, dental, vision, life, and disability insurance
- Paid vacation, holiday, and sick days
- Employer matched Simple IRA retirement plan

Application Process

Want to join the team? Let us know:

- Your past experience, especially as it relates to organizing diverse types of data, creating metadata, & solving spatial data management problems in a multi-user environment.

For extra credit, try this (in addition to submitting a cover letter and resume):

- We work in a multi-user environment wherein staff on the same project currently share spatial datasets (GDB feature classes, netCDF files, etc.) by copying/pasting to a file server. This results in problems with version control, schema locks, redundancy, permissions etc. Propose an alternative solution for sharing/managing data in a multi-user environment and be specific as to the types of technology, software packages and DBMSs you might use to implement the solution (schematics encouraged).

Please send materials to Pamela Frost, Vice President & Chief Operations Officer (pfrost@consbio.org).