XERCES SOCIETY
for Invertebrate Conservation

JOB TITLE: Conservation and GIS Data Analyst

LOCATION: Portland, OR

COMPENSATION: $44,000 - $52,000 starting based on experience

JOB START DATE: May 2020

APPLICATION DEADLINE: April 1, 2020 (applications reviewed after this closing date)

APPLICATION INSTRUCTIONS:
All applications must be submitted via our application website at: http://bit.ly/xerces-jobs

JOIN US!
Come join a growing team of conservation professionals at the Xerces Society who are dedicated to protecting some of the world's most important animals. We are seeking a skilled and collaborative data analyst to help develop and improve how we manage and use data to accomplish our mission.

The Xerces Society is at the forefront of invertebrate protection worldwide, harnessing the knowledge of scientists and the enthusiasm of the public to implement conservation programs. We take action by helping farmers and conservation agencies develop conservation plans for pollinators and beneficial insects, producing ground-breaking publications on insect conservation, training thousands of farmers and land managers to protect and manage habitat for beneficial insects, protecting endangered species and their habitat, and raising public awareness about the invertebrates of farms, forests, prairies, deserts, creeks, wetlands, and oceans. Our methods focus on habitat conservation planning, education, scientific analysis, advocacy, and applied research to conserve invertebrates, such as bees, butterflies, mollusks, and dragonflies.

WHAT YOU'LL BE DOING:
The analyst is responsible for improving data management systems and processes across Xerces Society's conservation programs, and to develop and provide tools to improve external communications. This includes oversight of all GIS and other conservation data operations including data structure and metadata development, intake (procedures, tools, and data integrity policies), system administration, implementation, and user support. The analyst will report to the Endangered Species Program Director, but work across the entire organization's conservation programs.

ESSENTIAL JOB FUNCTIONS AND RESPONSIBILITIES:
Data management and analysis
- Manage, organize, and streamline existing datasets, working in collaboration with Xerces Society conservation program staff.
- Provide technical assistance as needed:
  -Manage user account and permissions.
  -Build and maintain centralized GIS data library.
  -Respond to data and map requests from conservation staff.
  -Alert staff to new tools and training opportunities.

-Train staff to access data, use relevant tools, build maps, etc.
-Produce tabular, geospatial, and analytical data for specific projects, including on an ad hoc basis for team members who do not have training or access to data.
-Build simple self-service access tools for staff who are not regular GIS users.
-Create Best Practices guidelines for using new tools, databases, templates, etc.
-Manage GIS field users and data.
-Advise on sampling design, database use, and related equipment (i.e. field tablets, GPS devices, software, etc.).

- Improve upon existing systems:
-Identify and pursue opportunities to continually improve the quality of data management systems, processes, and standards within the Xerces Society's conservation programs.
-Apply judgement to standardize and integrate existing Xerces conservation databases to better meet project needs of our growing team.
-Conduct quality control checks on existing databases.

- Identify and use appropriate technologies to make workflows more efficient, and to make data, analyses, maps, implementation tools and other information more easily accessible to others.
-Create maps that facilitate the interpretation of species occurrence data, maintain databases, and perform spatial analyses.
-Create and manage data collection tools to be used by staff in habitat restoration and planting projects.
-Create map templates and other standardized items to be used by staff in developing reports and presentations.

- Apply quantitative spatial statistics and computational modeling to conduct scientifically rigorous analyses that inform conservation decisions, in collaboration with Xerces Society Conservation Staff.
-Consult with colleagues and advise on analyses and study design.
-Be familiar with best available data sources for ecological data analysis, including climate science data that can be integrated into projects.
-Develop a system for effectively tracking and reporting on conservation effectiveness metrics that can be easily accessed by the executive director, program directors, the communications team, and the development team. Work with conservation program staff to incorporate the use of this tracking system into daily operations and practices.

Communication and outreach
- Develop visualizations, maps, infographics, short written narratives, and other static and interactive tools to effectively communicate conservation effectiveness metrics and achievements.
- Work with Xerces' conservation programs and communications teams to design and produce creative, high-quality digital and printed communications which will resonate with Xerces' audiences and communicate conservation goals and achievements.
- Build visualizations, infographics and interactive tools for internal and external use.

KNOWLEDGE, SKILLS, AND EXPERIENCE:
REQUIRED
- Experience managing large biological or natural resources data sets, including historical or time-series data

-Application of Federal Geographic Data Committee, Darwin Core, or other data or database metadata standards.
-Proficiency with Microsoft Access and Excel, including database design and queries.
-Development and maintenance of metadata structure and content.

- Intermediate to advanced GIS experience, including ability to create and manipulate raster, geodatabase, and feature datasets, as well as create high quality maps and other visual products.
- Experience using ESRI ArcGIS products (ArcMap, ArcGIS Pro, ArcGIS Online), Apps (Survey123, Collector, Dashboards), extensions (Spatial Analyst, Geostatistical Analyst, 3D Analyst, Web Publisher) and tools (Model Builder, R-ARCGIS).
- Experience developing user-friendly procedures and guidelines for data management and supporting GIS field users.
- Conservation biology background and/or understanding of conservation biology issues.
- Experience working with diverse partners and audiences to share, develop, and collaborate on data management projects.
- Excellent interpersonal and project management skills, including the ability to identify and understand the data management needs of multiple Xerces staff and come up with a cohesive data management strategy for the organization.
- Proven ability to communicate technical information to a wide variety of audiences, from land managers and policy makers to other researchers and the public.
- Understanding of data use policies and ethics.
- Strong communication and writing skills, organizational skills, and attention to detail.
- Ability to manage time and diverse activities under tight deadlines, while delivering high quality results.
- Ability to develop work plans and work independently on assigned tasks.
- Takes initiative in identifying problems and designing novel solutions.

PREFERRED
- Understanding of quantitative and computational methods to analyze data, including the use of spatial statistics, data modeling, and analysis to identify patterns.
- Scripting proficiency (e.g. Python, R, JavaScript, Visual Basic, SQL/PostgreSQL).
- Graphic design skills and proven experience designing visually appealing infographics, tables, charts, etc. to help communicate conservation stories, track program metrics.
- Experience and skill in working with diverse teams and constituents in a respectful, equitable, and inclusive manner
- Cross-cultural, multicultural, and/or multilingual skills, background, or experience.
- Experience using data gathering tools in field settings: tablets, GPS, cellular mobile devices.
- Experience with managing data privacy and information security.

QUALIFICATIONS:
REQUIRED
- Bachelor's degree in GIS / Geospatial Science, Ecology, Biology, Environmental Science, Geography, Geology or related field, or demonstrated truly equivalent knowledge, skills, and experience.
- Minimum of 2 years' experience, or demonstrated truly equivalent knowledge and skills, working with databases and GIS in data management and analysis.

PHYSICAL REQUIREMENTS:
- Able to work in stationary position for periods of 2-8 hours, with reasonable breaks and/or reasonable accommodations.

STATUS: Full-Time, salaried, exempt position, scheduled to work ~ 40 hours/week. Schedule can be made flexible and opportunity for partial remote work location can be made, consistent with work requirements, depending on employee preferences.

BENEFITS: This position includes a generous benefits package: eleven paid holidays including two floating holidays that may be used for a personal or religious holiday observed by the employee or other occasion preferred by the employee, paid time off, paid health, dental, and disability insurance, option to participate in a pre-tax flexible spending account for medical and dependent care expenses, participation in a 401k retirement program upon eligibility and a flexible work environment.

TERMS: The Xerces Society is an at-will employer. Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time. In compliance with federal law, all persons hired will be required to verify identity and eligibility to work in the United States and to complete the required employment eligibility verification form upon hire.

MORE INFORMATION: For more information on the Xerces Society and our programs, please see our website: www.xerces.org

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EQUAL EMPLOYMENT OPPORTUNITY
The Xerces Society is proud to be an Affirmative Action / Equal Opportunity Employer.

It is Xerces' policy to provide equal employment opportunities to all qualified individuals and to administer all aspects and conditions of employment without regard to the following: race, color, ancestry, place of birth, citizenship or immigration status, age, sex, sexual orientation, gender identity, religion, marital status, pregnancy, childbirth, family relationship, health insurance status, medical history or condition, disability, genetic information, military or veteran status, non-conviction arrest record, wage garnishment status, or any other status protected under applicable federal, state, or local laws. Our commitment to equal employment opportunity extends to all aspects of employment, including all decisions on hiring, job assignment, training, compensation, promotion, demotion, access to benefits, transfer, leaves of absence, discipline, and termination.

Xerces is committed to establishing and maintaining diversity, equity, and inclusion, and encourages individuals of all ethnicities, abilities, genders, and cultural and religious backgrounds to apply.