Conservation Support GIS/Geovisualization Specialist
Cornell Lab of Ornithology
Conservation Science program

JOB SUMMARY

The Cornell Lab of Ornithology is a major, globally focused institution for research, training, and public communication relating to birds and biodiversity. Conservation Science is one of eleven programmatic units that carry out the Lab's mission to interpret and conserve the earth's biological diversity through research, education, and citizen science focused on birds. By working at the interface of science and application, the Conservation Science program generates, integrates, and applies the best science to real-world problems, shares knowledge and effective tools with practitioners, decision-makers, and partners, and builds capacity in partner organizations and future conservation leaders.

This position will be based within the Conservation Science program and will focus principally, but not exclusively, on facilitating use of eBird data by decision-makers and practitioners around the world. eBird has become one of the world's largest and fastest growing biodiversity databases, and one that is unparalleled in terms of global coverage and spatiotemporal resolution. As scientists at the Lab continue to develop innovative approaches to ensure data quality and create robust models of the distribution and abundance of birds, eBird is increasingly in demand to guide management, planning, and policy-making. eBird data is used in a variety of conservation and research projects at academic institutions, governmental departments and agencies in the U.S. and abroad, NGOs, and the private sector. However, use and application of eBird is often constrained by limited capacity in partner organizations to manipulate eBird data to produce the necessary datasets, maps, and data visualizations. This position will address that constraint by developing and producing those decision support products.

JOB DESCRIPTION

Conservation Support GIS/Geovisualization Specialist
Application Programmer II - Band E
Lab of Ornithology, College of Agriculture and Life Sciences
Cornell University

The Conservation Science Program at the Lab of Ornithology is currently seeking a Conservation Support GIS/ Geovisualization Specialist. Specific duties include:

- Use cartographic principles, GIS systems, modern map editing, processing, and creation technology to develop maps, generate datasets, create data visualizations, and produce other materials for the Conservation Science program staff to share with partner organizations, institutions, and agencies in support of decision-making related to conservation, natural resource management, and sustainable development.
- Typical products include estimates of seasonal distributions and relative abundances of focal bird species, sometimes along with other relevant environmental data, that are provided to partners as GIS data layers and accompanied by spatially-explicit information about the robustness of these estimates. These layers are frequently requested by partners to identify areas of seasonal importance for focal species, which support prioritization and planning processes as well as guide management decisions.
- Work closely with others in the Conservation Science program to best support priority projects and partners.

Annual appointment with possibility of renewal based upon performance and available funding.

Required Qualifications:
- Bachelor's Degree in discipline related to Geography or Ecology with at least 1 year experience in applying GIS principles in avian ecology, avian conservation, citizen science or similar field.
- An understanding of the principles of web mapping and map server frameworks and be comfortable with data management, manipulation, design, programming, and deployment of map services for use in decision support tools, often using JavaScript and/or other web framework languages.
- Experience with scientific, visualization, and GIS programming languages, such as R, Python, Oracle Spatial, postGIS, GDAL and QGIS.
- Candidate must show strong problem solving, critical thinking, and writing skills, work effectively on a team, learn technical material quickly, establish realistic goals, and deliver quality work on schedule with minimal supervision.
- The ability to prioritize activities and multitask is essential.

Preferred Qualifications:
- Master's degree and extensive experience working with large datasets and statistical modeling outputs in a GIS environment, including data management, analysis, and visualization.
- Experience communicating scientific concepts to public audiences via both spoken and written forms, as well as through visualizations, maps, and decision support tools.
- Experience in integrating knowledge in avian biology, conservation, biogeography, taxonomy, and citizen science with GIS practices, principles, and relevant technical skills.
- Familiarity with or previous training in avian ecology, conservation, or natural resource management is highly desired.

When applying through our system, please remember to attach your application materials (resume/cover letter/CV) in either Microsoft Word or PDF. In the Experience section of your application, use the Paperclip icon to search for file(s) or use the 'Drop Files Here' box to manually drag document(s) into your application. For a more detailed description and instructions on how to create a profile online please click here as an external candidate or click here if you are an internal candidate

Applicants to provide cover letter, resume, contact information for 3 references.

Visa Sponsorship is not available for this position; not eligible to apply.

Relocation assistance is not provided for this position.