

## **Quantitative Ecologist National Audubon Society**

### **Position Summary:**

As part of Audubon's 2016-2020 Strategic Plan, the organization will focus on five strategic initiatives: Coasts, Working Lands, Water, Climate, and Bird-friendly Communities. And, to help support the implementation of these strategies, the National Science Division applies analytical methods to guide where the on-the-ground conservation work will be most effective and rigorously measures progress as projects move forward.

As a member of this important group, the Quantitative Ecologist will have responsibility for helping to conceive and execute analyses fulfilling the Division's core responsibilities. These include: 1) modeling patterns of bird abundance and distribution throughout the annual cycle and the processes that shape those patterns; 2) providing scientific justification, study design, and analyses for projects that engage the public in science; 3) supporting design and analysis of avian monitoring programs; and 4) prioritizing conservation efforts.

S/he will report into the Director of Conservation Science and will work closely with leadership and field teams across multiple strategic initiatives to provide critical analytical capacity that will serve as the foundation for measuring the success of Audubon's species-focused conservation work. This position may be remotely based or embedded within one of Audubon's state/national offices across the United States, preferably the San Francisco location.

**Candidates should also submit a cover letter when applying to this position, including citations for 2-3 peer-reviewed publications and a statement on preferred work location(s).**

### **Essential Functions:**

- Use long-term, large-scale data sets to estimate population trends through space and time;
- Assist with design and analysis of avian monitoring programs;
- Analyze and prioritize conservation efforts across the Audubon network;
- Contribute to peer-reviewed publications, presentation, and grant-writing in support of projects; and
- Coordinate and collaborate with Audubon staff and external partners throughout North America.

### **Qualifications and Experience:**

- Ph.D. in ecology, biostatistics, natural resources, or other conservation- or statistic-related field required.
- Demonstrated experience applying Bayesian and Frequentist approaches to statistical analysis of large data sets (e.g. mixed-effects models, GLMs, GAMs, BRTs, RandomForests, GAMMs, Bayesian hierarchical models, occupancy models, resource selection functions).
- Demonstrated ability to clearly frame research questions, design monitoring studies, and implement analyses, as well as script analyses in R and/or Python.
- Comfort working both independently and in a team-based environment.
- Demonstrated ability to learn and implement new quantitative approaches and think creatively about connections between birds, places, and people.

- Excellent oral and written communication skills, to include a strong writing background in order to lead and co-author peer-reviewed publications.
- Experience with GIS.
- Passion for conservation, applied ecology and the mission of the National Audubon Society.
- Preferred qualifications include:
  - Experience in high performance computing (e.g. MCMC, STAN, JAGS, BUGS, cloud computing) and with version control software (e.g. Github).
  - Demonstrated ability to communicate with colleagues at all levels across the organization
  - Experience in ornithology, especially birds of North America, and/or with the birding community, including past participation in Christmas Bird Count or North American Breeding Bird Survey.
  - Familiarity with Important Bird Areas or site-based conservation strategies a plus.

To apply:

<https://careers-audubon.icims.com/jobs/2874/quantitative-ecologist/login>