Postdoctoral Scientist

Development of Integrated Models of Bird Distribution and Abundance

USGS Patuxent Wildlife Research Center

Position Title: Post-doctoral Research Associate

Salary: GS-12 salary (approximately \$80K annually) and benefits

Location: Patuxent Wildlife Research Center, Laurel, MD

Performance Period: 18 months (anticipate start date April 2020)

Application Deadline: December 13, 2019 or until a suitable candidate is found

Position Summary:

USGS Patuxent Wildlife Research Center is seeking a post-doctoral research scientist with interest in quantitative ecology, statistical modeling, and migratory bird management. Specific duties will be to develop a framework for characterizing distribution, abundance and trends of species using integrated models which combine multiple sources of bird survey data such as from the North American Breeding Bird Survey (BBS), eBird and local surveys conducted by U.S. FWS and other organizations. Integrated models will serve to support population assessments of non-game species for which take is managed by the U.S. FWS such as common raven and double-crested cormorants.

Results from the project will be of direct relevance to the management of non-game species managed by USFWS and will enhance the value of the existing large-scale bird surveys for use by conservationists, researchers, and the public.

The fellow will work closely with a team of quantitative ecologists with USGS Patuxent Wildlife Research Center (Andy Royle and John Sauer), US FWS Population and Habitat Assessment Branch (Pat Devers) and the Cornell Lab of Ornithology (Orin Robinson).

Minimum Requirements:

- 1. Ph.D. in biology (wildlife), statistics, or related field, with a focus on quantitative methods, survey design, and hierarchical modeling.
- 2. Applicant must be within 5 years of receiving PhD.
- 3. Applicant must be a US citizen.
- 4. Demonstrated familiarity with statistical models relevant to the development of integrated models of species distribution and abundance.
- 5. Demonstrated proficiency with computing platforms such as R and software to fit Bayesian hierarchical models (e.g., JAGS, NIMBLE) is required.
- 6. Demonstrated desire and ability to publish in the peer-reviewed literature.

Desired Abilities:

Competitive candidates will have a strong background in analysis of wildlife surveys. Strong programming skills are required, including a high level of proficiency with R for data manipulation, statistical modeling and Bayesian analysis. The successful candidate will have excellent written and personal communication skills and experience working closely with management agencies on applied questions in wildlife conservation.

Application:

Applicants should email: (1) a letter describing your background and interests – the letter should address specifically how the applicant meets both the minimum requirements and the desired abilities, (2) curriculum vitae, and (3) the names and contact information for 3 references to Andy Royle (aroyle@usgs.gov). Please include "Integrated modeling postdoc" in the subject line.

For further information, contact:

Andy Royle, aroyle@usgs.gov, 301-497-5846, USGS Patuxent Wildlife Research Center, 12100 Beech Forest Road, Laurel, MD 20708.