

POSTDOCTORAL RESEARCH FELLOWSHIP

Quantitative Modeling of Avian Collision Risk We are seeking a postdoctoral researcher to transform the current avian collision risk modeling used to evaluate effects determinations of offshore wind development on migratory birds within the United States. The postdoctoral fellow will develop an online-graphical-interactive web application (i.e., RShiny, <https://shiny.rstudio.com/>) that allows users to implement a transparent and flexible version of the collision risk model that fully propagates uncertainties. This modeling platform will be used to evaluate the effects of a range of scenarios of offshore wind development along the U.S. Atlantic Outer Continental Shelf on ESA-listed Roseate Tern, Piping Plover, and Red Knot populations. Model outputs will include automatic report generation (e.g., using Sweave and knitr) and be designed to facilitate the communication of estimation uncertainty to decision-makers. Postdoctoral candidates must have strong modeling and coding experience in R (<https://www.r-project.org/>), fundamental knowledge of probability and statistics, and ideally have experience with RShiny; knowledge of the life history and ecology of migratory birds is ideal, but not necessary. Annual salary is \$60,000-\$65,000 plus full benefits, depending on experience. We are expecting a start date of January/February 2020 (with some flexibility) and funding for 18 months. This work will be done through the Department of Natural Resources Science at the University of Rhode Island, under supervision of Dr. Brian Gerber (<https://web.uri.edu/gerberslab/>), and in collaboration with federal biologists from the U.S. Fish and Wildlife Service and Bureau of Ocean Energy Management.

REQUIRED QUALIFICATION:

• Completed PhD in ecology, conservation, mathematics, statistics, computer science, or a related discipline, and training and experience in ecological modeling and statistical analyses.

PREFERRED QUALIFICATION:

- Demonstrated high-level knowledge of the R programming language and experience with RShiny.
- Demonstrated ability with other languages, such as HTML, CSS, C++, JavaScript, etc.
- Demonstrated knowledge in spatial analyses.
- An interest in communicating scientific and statistical findings to natural resource decision makers.
- A record of research productivity and success in publishing peer-reviewed journal articles.
- Possess strong collaboration and time-management skills and a history of meeting project deadlines.
- An interest in collaboration and mentoring with graduate students.
- Demonstrated knowledge of the life history and ecology of migratory birds.

Please send a letter of interest (1-2 pages), CV, and contact information for 3 references to bgerber@uri.edu. Please use the Subject Line: Postdoctoral Fellowship Application. Review of applications will begin 1 October 2019. Early applications are encouraged.