

Postdoctoral Fellowship Focused on the Ecological Modeling of Bustard Species

Smithsonian's National Zoo & Conservation Biology Institute

The Smithsonian's National Zoo & Conservation Biology Institute (NZCBI; <https://nationalzoo.si.edu/conservation-ecology-center>) is seeking a Post-doctoral Research Fellow to advance research in the spatial ecology and conservation of bustard species with a special focus on houbara bustard. This research program is part of a scientific collaboration between NZCBI, the International Fund for Houbara Conservation (IFHC, www.houbarafund.org), and Reneco International Wildlife Consultants LLC (RENECO). The position is a full-time, 2-year appointment (GS9 – Step 1 equivalent: \$65,000/year + annual health care benefit) to be based at NZCBI's research facility in Front Royal, VA, USA. The fellow may also visit Reneco scientists for research discussions and coordination and travel to bustard field and IFHC research and conservation facilities in North Africa and Central Asia for data collection, analysis, and model validation.

The IFHC has cultivated an unprecedented dataset collected over the past 30 years which consists of intensive monitoring of reinforced houbara populations. These data will form the foundation for analyses. The post-doctoral fellow will need to demonstrate significant programming and analytical skills for analyzing large datasets. He/she will integrate remote sensing data layers and forecast how land use/land cover change, human impacts, resource availability, and projected climate change are predicted to affect the population distribution and abundance of bustards. The post-doctoral fellow will be encouraged and expected to develop their own research objectives that fit in with the project.

The fellow will work with Drs. Jared Stabach (NZCBI) and Yves Hingrat (RENECO). The preferred start date for the fellowship is **June 2025**. Interested applicants should submit a CV, names and contact information for 3 references, and cover letter to IFHC.SCBI.Fellow@gmail.com by **March 31, 2024** or until filled. Please include "Bustard Fellowship" in the subject header. The cover letter should include (i) a summary of the applicant's research and analysis experience that are relevant to meet the fellowship objectives and (ii) the applicant's earliest possible start date. All materials should be included in a single pdf document.

Preferred qualifications

- A Ph.D. in Ecology, Geography, Environmental Science, Statistical Modeling, or a related academic field
- Experience working in arid environments on avian species.
- Expertise and experience in advanced spatial analysis, with expertise in incorporating remote sensing variables in analytical frameworks. The applicant must demonstrate the ability to manipulate large spatial databases.
- Exposure to multi-scale occurrence modeling.
- Significant analysis skills in R; additional programming experience advantageous (e.g., Python, Java, and/or Google Earth Engine).
- Experience designing, organizing, and managing field work.

- Enthusiasm for collaborating across institutions and countries to jointly pursue research topics relevant to both academic and applied audiences.
- Willing and able to reside near SCBI in Virginia, and to travel to Abu Dhabi, and field sites in North Africa, Middle East and Central Asia.