Call for 1-2 highly motivated research assistants for work on bioacoustics of birds and insects in the Kanha landscape (Paid position)

Timeline: **March to December 2021**

Project Description: **Sounds of restoration: Understanding the impact of forest restoration on fauna using bioacoustics**

The emerging technology of acoustics is opening a new window into conserving biodiversity across human-modified landscapes. Low-cost and time-efficient acoustic technology allows novel possibilities for conservationists/natural resource managers to identify where and when diversity is under threat. In this study, we aim to understand the impact of forest restoration in the buffer region of Kanha on vocalizing fauna. Several local communities have applied for community forest rights in the buffer and restored their respective forests. Restoration has taken place by way of removal of an invasive shrub, Lantana camara, for 3 consecutive years after which the forest is left to naturally regenerate.**We use bioacoustics to quantify the impact of this restoration in comparison to unrestored sites, degraded forests (predominantly Lantana and ~10% tree cover or less) and benchmark forests within Kanha NP (with little to no lantana).** As a research assistant on this project, you will chiefly be involved in the analysis of the acoustic data collected from sites in this landscape. However, if time and funds permit, there is ample opportunity to join the team for fieldwork.

Duties involve:

1. Annotation of acoustic data using Raven Pro.
2. Using R / Kaleidoscope to carry out automated species recognition of multiple species of birds (using machine learning algorithms).
3. Potential field work in Kanha and Satpura Tiger Reserve.

Minimum Qualifications required:

1. Master's in wildlife biology / ecology / related field is preferred, but those with a bachelor's degree and a keen interest in wildlife biology, along with previous experience are encouraged to apply.
2. Ability to identify birds in central India through vocalizations.
3. Knowledge of R or other programming languages (preferred).

Expectations and Opportunities provided:

The research assistant(s) will work with Pooja Choksi, a PhD candidate at Columbia University. Opportunities exist for the development of independent projects that involve acoustics and behavioural ecology of birds of interest using data available. Depending on the

involvement, the RA will be provided authorship on publications that emerge from these projects.

Expectations include excellent data management, transparent and efficient communication with field assistants, managing field work in harsh conditions and a keen interest in natural history.

Opportunities this RAship offers:

1. Experience of handling acoustic data
2. Opportunity to learn different methods of acoustic analysis and carry out field work in central India
3. Possibility to work with a larger team on side projects using data collected (check out Project Dhvani)

How to apply:

Interested applicants should send a 1-page resume and 1-page statement of interest to pc2796@columbia.edu. All applications must be e-mailed with the subject line: **Research Assistant - Application <Name>**.

For more information, please see: https://poojachoksi.weebly.com/

Please send your applications by **March 10th 2021**