

Postdoctoral Research Associate: Landscape Connectivity of Andean Bears in Ecuador

POSITION LENGTH: 15 month appointment with possible extension pending securing additional funding

SALARY: \$42,300/year plus benefits (health and dental insurance, retirement, life insurance, disability)

START DATE: As soon as possible

POSITION SUMMARY:

The New York Cooperative Fish and Wildlife Research Unit at Cornell University is seeking candidates for a postdoctoral position to estimate population size and landscape connectivity of the endangered Andean Bear (*Tremarctos ornatus*) in Ecuador, using spatial capture-recapture methods. The postdoc will contribute to the project, titled, "Landscape-Scale Conservation in the Ecuadorian Andes: The Socio-Ecological Corridor" that seeks to design an optimal corridor that links three protected areas in Ecuador in order to support and sustain biodiversity and local communities. The project team is large and includes faculty members from Cornell University (Dr. Angela Fuller and Dr. James Lassoie, Department of Natural Resources, Dr. Carla Gomes, Department of Computer Science, and Dr. Gregory Poe, Dyson School of Applied Economics and Management), Patuxent Wildlife Research Center (Dr. J. Andy Royle), University of Andina Simon Bolivar (Dr. Carlos Larrea), and University of San Francisco Quito (Santiago Molina). The in-country work also involves numerous conservation partners and the Secretary of Environment, Ecuador.

DUTIES:

The project will involve analysis of existing camera trapping and incidental observation data using spatial capture-recapture (SCR) models to estimate density and landscape connectivity, design of a larger-scale camera trapping study, development of GIS data for use in models of landscape connectivity, some field work to support the project (mainly in the extremely diverse Ecuadorian cloud forests), and writing grant proposals to extend the effort geographically and into the future.

Ideally the person can communicate effectively in Spanish. The candidate will be expected to develop manuscripts for submission in peer-reviewed journals and communicate research to project PIs and partners. The candidate will be supervised by Dr. Angela Fuller, U. S. Geological Survey, NY Cooperative Fish and Wildlife Research Unit, at Cornell University (Ithaca, New York) and Dr. J. Andy Royle, U. S. Geological Survey, Patuxent Wildlife Research Center (Laurel, Maryland).

The postdoc will work closely with Dr. Carla Gomes, Department of Computer Science, Cornell University. The postdoctoral scientist will be housed in the Department of Natural Resources, Cornell University and will be expected to travel to Ecuador at least once during the project period. The candidate will be expected to work closely with the project team and external partners.

There is not much known about the Andean bear, a species of major conservation concern due to increasing habitat loss and fragmentation of its extremely narrow range. The study area, in the Andes mountains, from the Cotacachi-Cayapas Ecological Reserve north of Quito to the Reserva Ecologica Los Ilinizas Southwest of Quito harbors an extremely important population of the species. The candidate will have the opportunity to get in on the ground floor of the conservation of this species, and potentially develop ancillary efforts on numerous other rare carnivore species that coexist with the Andean bear in the cloud forests of Ecuador.

MINIMUM REQUIREMENTS:

1. Ph.D. in ecology, wildlife biology, or a related quantitative field.
2. Strong programming skills with demonstrated knowledge of statistical modeling used to describe population dynamics from mark-recapture data.
3. Demonstrated desire and proven ability to publish in peer-reviewed journals.
4. Excellent writing and personal communication skills.
5. The ability to work independently and under limited supervision as well as collaboratively.

RECOMMENDED QUALIFICATIONS:

Competitive candidates will also have one or more of the following qualifications: fluent in Spanish, have a background in Bayesian inference, hierarchical modeling, proficiency with R and WinBUGS, and experience with ArcGIS.

TO APPLY:

Please send a curriculum vitae, a letter of application describing your background and experiences and responding to each of the requirements and qualifications, and the names and contact information for three references (all in a single pdf document) to Dr. Angela Fuller, Department of Natural Resources, Cornell University, NY Cooperative Fish and Wildlife Research Unit, 211

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