

**UNIVERSIDAD DEL AZUAY**  
**VICERRECTORADO DE INVESTIGACIONES**  
**DOCTORAL RESEARCH SCHOLARSHIP**

The Universidad del Azuay, within the framework of the project “Importance of Páramo Landscape and Habitats for the Assemblage of Birds in an Andean Biosphere Reserve,” is offering a scholarship for doctoral studies within the Doctoral Program in “Renewable Natural Resources” at the Universidad de Cuenca and Universidad del Azuay. The project aims to identify, at a landscape scale, the most important micro-basins for the regional diversity of páramo birds, understand how species-habitat networks vary according to habitat structure and composition, and explore the structure and associations of birds across different páramo habitats within the Macizo del Cajas biosphere reserve.

**Overview of the project**

The páramo ecosystem is influenced by human activities that promote habitat loss, leading to negative impacts on high-Andean biodiversity. Throughout the region, natural resource management occurs at the geographical scale of micro-basins. However, this scale has never before been used to understand biodiversity dynamics and to promote tools for biological conservation that are more compatible with the páramo. Birds possess key characteristics that help in understanding changes in the structure and composition of the habitats they occupy. For example, the diversity and assemblage of bird communities are directly related to the amount and quality of available habitat (within a micro-basin), as well as the landscape configuration (a set of characteristics within the micro-basins). In this regard, it is crucial to understand the relationships between space and bird diversity through a comprehensive approach. This study will use different metrics and approaches to bird diversity to understand: 1) the importance of micro-basins in the páramos of the Macizo del Cajas biosphere reserve for regional bird diversity; 2) variations in species-habitat network assemblages across páramo habitat structure and composition; 3) the effect of páramo habitat on species associations based on the phylogenetic diversity of páramo birds.

**Scholarship Details**

The research project will fund tuition fees with a monthly stipend of \$1,275 USD for four years.

**1. Student profile**

Master's degree in Renewable Natural Resources or related fields. Experience in database analysis and management. Experience in research related to avifauna of high Andean ecosystems will be valued.

## **2. Application requirements**

Applicants must submit the following documentation on the Postgraduate Department's application platform:

- Master's degree registered with SENESCYT.
- Evidence of English proficiency with a minimum level of B2 or its equivalent.
- Curriculum vitae with an emphasis on research skills, including scientific publications, participation in research projects, execution of master's and undergraduate theses, among others.
- A motivation letter written in English, explaining why you wish to pursue the doctoral program, your professional objectives related to the program and the research project you are joining, your research experience, and the knowledge you possess that can contribute to your success as a student in the program, your academic strengths, among others.
- A recommendation letter from a professor at a higher education institution with a doctoral degree (PhD), indicating that you have the necessary academic aptitude to successfully complete a doctoral program. This professor should be different from the one who will supervise your doctoral thesis.
- Copies of undergraduate and graduate degree certificates, and copies of transcripts of grades obtained in master's courses.

### **Other relevant criteria for selection**

- Demonstrable experience in field work for bird data collection in páramo ecosystems.
- Demonstrable experience in the management and analysis of community data.
- Experience in programming with R and in the use of geographic information systems such as ArcGIS and QGIS.
- Scientific publications.

## **3. Selection Process**

### **Important dates**

Online application\*: until 01/Nov./ 2024

Merit assessment: until 15/Nov./2024

Interviews: until 29/Nov./ 2024

Selection of the student: 06/Dec./2024

Start of the project: Jan./2024

\*Application documents must be entered on the application platform of the Postgraduate Department.

### **Evaluation of candidates**

The evaluation of merits will be carried out by the members of the Selection Committee determined by Universidad del Azuay.

### **Interview**

The interview will be conducted in the presence of the members of the Selection Committee. The following will be evaluated:

- The applicant's motivation and aptitude for pursuing the doctoral program.
- Their previous experience and/or knowledge in the specific field of study of the research project, as well as other related areas.
- Their personal interest in the specific field of study of the research project.

### **Subscription of the doctoral scholarship contract**

The selected applicant must sign a scholarship contract with the Universidad del Azuay, which will be renewed annually upon receiving a favorable report from the Thesis Director.

In order to sign the scholarship contract, the applicant must present their admission letter to the doctoral program issued by the Universidad de Cuenca and the Universidad del Azuay.

The scholarship contract will include the respective rights, obligations, and commitments of the student, as well as stipulating the penalties in cases of non-compliance.

### **Additional information**

- The student will be linked to Universidad del Azuay under the supervision of Dr. Pedro Astudillo Webster, project director.
- The student will work with two collaborators in the project:
  - Dr. Patricio Crespo, Departamento de Recursos Hídricos y Ciencias Ambientales of the Universidad de Cuenca; y,
  - MSc. David Siddons, research professor of the Escuela de Biología of the Universidad del Azuay.