

## **GIS Internship in the Coastal Conservation Corridor:**

**Description: GIS Mapping and Analysis Intern for Coastal Conservation Corridor**

### **Background:**

Centered around the Lalo Loor Dry Forest Reserve, the Ceiba Foundation has worked for years to protect highly threatened coastal semi-deciduous forest. In 2020 we announced the inauguration of a Conservation and Sustainable Use Area (or ACUS, its Spanish acronym), signed into law by four counties in the northern Manabí province of Ecuador. The ACUS formally establishes the Coastal Conservation Corridor, including over a half-million acres, of which nearly half is covered in forest. Participants include landowners with forest and agricultural lands, small ecotourism operations, local artisanal producers, and rural communities who can benefit from investments in conservation and sustainable development. To encourage collaborative participation in the corridor, Ceiba is developing an up-to-date GIS database to reflect forest cover, stream flows, watersheds, and much more. The database will be made publicly available for use by participants in the corridor and ACUS, to help plan current and future projects. Furthermore, we will use the assembled data to analyze land-cover change, relationships between water quality and forest cover, assess the quality of existing forest patches, and prioritize sites for reforestation. We seek an intern with ample prior GIS experience, in either ArcGIS or QGIS, to work closely with Ceiba field personnel and office staff to organize the data layers, implement a method for making them publicly available such as through an ArcGIS dashboard, and conduct targeted analyses.

### **What will you do?**

- Review and validate existing data layers, and identify priority data needs
- Obtain satellite and other remote sensing imagery for the region
- Analyze current, and historical, land-cover patterns, and calculate rates of change in forest cover, etc.
- Create an ArcGIS dashboard for public access to primary data layers
- Conduct targeted analyses, in collaboration with Ceiba staff
- Develop protocol for prioritization of reforestation sites
- Assist with building land-cover classification map that will contribute to Ceiba's wildlife roadkill analysis for publication

### **What will you learn?**

- ArcGIS data organization
- GIS analysis of forest patch size, forest quality, relationship between land cover and water quality
- Remote imagery analysis, and land-cover classification
- Publication of GIS data to an interactive web-based platform

### **What do we seek?**

- 2+ years experience with GIS (either ArcGIS or QGIS platforms), including data management and analysis
- Some programming experience a plus (though not required)
- Detail oriented and organized, able to follow meticulous directions carefully
- Good communicator, in English (Spanish a plus, but not required)

**\*\* Please note that this internship can be remote, or based at the Lalo Loor Dry Forest Reserve.**