Wildlife Monitoring Internship 2025

The Smithsonian's National Zoo and Conservation Biology Institute (SNZCBI) is seeking an intern to assist with multiple projects related to conservation technology for wildlife monitoring. SNZCBI scientists collect data on wildlife and natural ecosystems globally using sensors such as camera traps, GPS collars, and remote sensing. As wildlife data becomes increasingly digital, we require robust technology systems to ensure long-term access and sustainability.

To support Smithsonian staff members engaged in biodiversity monitoring, we are hiring an intern to assist with two key programs focused on camera trap and GPS collar data.

Program Areas

Digital Biodiversity Collection
The Smithsonian is establishing its first 'born digital' collection—a high-quality, publicly accessible database of camera trap images chronicling the distribution, abundance, and species richness of wildlife over time. This collection will include datasets from the annual Snapshot USA survey and other related projects and will involve machine learning via the Wildlife Insights platform, participatory science via Zooniverse.org, and data science techniques. Wildlife Movement Data & Conservation Indicators
This initiative focuses on developing quantitative metrics and indicators from GPS tracking and remote sensing data to inform biodiversity conservation. The project integrates movement data into conservation indicators, bridging the gap between ecological research and practical conservation strategies at local and global scales.

Intern Responsibilities

The intern will work closely with two Smithsonian staff members:

The Digital Collections Manager – supporting data curation, quality control, metadata corrections, and project setup for Wildlife Insights and Zooniverse.

The Quantitative Ecologist – assisting with analysis of GPS tracking data, camera trap images, and satellite imagery.

Specific tasks include:

Identifying and quality-checking incoming data Correcting metadata and classification errors Transferring data between platforms and setting up projects in Zooniverse Engaging with volunteers and community scientists Analyzing diverse ecological datasets Developing data wrangling skills in R, Python, and JavaScript

This internship offers valuable hands-on experience at the intersection of ecology, conservation technology, machine learning, and community science.

Qualifications

Required Qualifications

Current or recently graduated undergraduate or graduate student in ecology, wildlife biology, conservation biology, environmental science, or a related interdisciplinary field. Ability to accurately classify species and behaviors in camera trap images. Interest in camera trap, GPS collars, wildlife monitoring research, and/or plans for a career in wildlife biology/conservation. Experience or aptitude in acquiring, manipulating, and managing spatial data, including digitizing maps/images, creating maps, and performing basic spatial analysis. Demonstrated qualitative, quantitative analysis and critical thinking skills. Excellent learning skills and attention to details. Excellent written and oral communication skills. Ability to work both collaboratively and independently.

Desired Qualifications

Experience with managing, maintaining, and populating relational databases. Experience with Zotero, EndNote, or other reference management software. Experience with statistical analysis (R, Python, SAS, etc). Experience with spatial data acquisition, storage, administration, and management functions via ArcGIS, ENVI, QGIS, and/or R; and/or remote sensing analysis via Google Earth Engine. Experience working closely as a team, managing multiple projects and prioritizing tasks from multiple sources and deadlines. Experience conducting field surveys in conservation or wildlife biology.

Location

This internship will comprise mostly office work and will be in-person at the Smithsonian Conservation Biology Institute in Front Royal, VA. The intern will be part of a cohort of interns at the Center with regular meetings and additional opportunities to interact with fellow interns and researchers.

Compensation

This position will be supported by a $1500/month stipend and optional $9/day on-site housing in

a communal dorm. The internship will be approximately 6 months, with a start date in May and end date in November, with the option for an additional 6-month renewal.

To Apply:

Applications deadline is March 14, 2025. Interested applicants should submit a cover letter, resume, and contact information for three references as a single PDF, named “Internship_Your Last Name.pdf” to both Sarah Huebner (huebners2@si.edu) and Weiqian Gao (gaow@si.edu). Please include your last name and “Wildlife Monitoring Internship” in the title of your email. Cover letter should include: Statement of interest. Potential start date and the duration of time you are available for the internship. Elaborate on your programming experience and skill as much as possible. Due to the high volume of applications received, we are unable to contact each application individually regarding the application status.