1. PhD Position in Geography: Scale effects of species extinction and assembly among lemurs in Madagascar

Keywords: spatial ecology, conservation biology, primates, tropical forest, remote sensing, biogeography

2. Project Overview

- The goal of this PhD position is to conduct research to determine species assembly patterns of arboreal mammals (lemurs) by investigating species disassembly in fragmented and continuous forest sites modified by humans. The PhD student will leverage a multi-scale and year approach to create species distribution models to understand 1. What characteristics contribute to species extinction, 2. What processes lead to species assembly patterns, and 3. How are 1 and 2 influenced by spatial and temporal scale.
- This research will provide important insights into understanding species-assembly
 processes and provide necessary information for preventing extinction among lemurs –
 the most endangered group of large animals in the world.

3. Institution & Location

- University of Guelph (LEMR lab):
 - o Lemurs
 - Environment
 - Malagasy
 - o Research
- Guelph, Canada
- PhD student will have access to dry lab space, computers, specialized equipment (e.g., GPS, camera traps, drones), and some field equipment (e.g., camping equipment).

4. Supervisor & Team

- Dr. Travis Steffens
 - My CFI-JELF and NSERC Discovery Grant funded research program investigates human-lemur interactions within a shared environment. I leverage

conservation biogeography, spatial ecology, and One Health approaches to understand how lemurs interact with and respond to human caused disturbance.

- Member of the International Union for the Conservation of Nature,
 Species Survival Commission, Primate Specialist Group for Madagascar
- International Fellow of the Explorers Club
- Fellow of the Royal Canadian Geographic Society
- Founding Director of Planet Madagascar,
- Potential collaborators for this project include colleagues from but not limited to Integrative Biology, Geography, Sociology and Anthropology, Ontario Veterinary College at the University of Guelph, colleagues from the University of Veterinary Medicine, Hannover, University of Toronto, Centre de Recherche sur la Biodiversite et L'Environment, France, and the University of Mahajanga, Madagascar.

5. Funding & Duration

Duration: 4 years

• Stipend/salary amount: TBD

• Start date (negotiable): September 2026

6. Research Tasks & Expectations

- Main activities: fieldwork, lab work, data analysis, modelling, and training.
- The PhD student will be expected to spend several months over at least 2 years collecting data in Madagascar
- The PhD student will be expected to collaborate with other lab members, a Malagasy PhD student from the University of Mahajanga, and Planet Madagascar, a non-profit founded by Dr. Steffens.

7. Eligibility & Requirements

- Academic background needed:
 - MSc or equivalent in physical geography, ecology, environmental science, statistics, or biological anthropology.
 - Evidence for capacity for scholarly publication in peer-reviewed journals
 - Evidence for capacity to secure scholarships and grants (e.g., Natural Sciences and Engineering Research Council of Canada, Ontario Graduate Scholarship, or equivalents)
- Essential skills:
 - o GIS skills with ArcMap or QGIS
 - o R programming

- Working knowledge of Python
- o Spatial modelling specifically species distribution modelling (or equivalent)
- o Experience working with remotely sensed data
- Statistical competency (preferably in spatial statistics)
- Field data collection in remote locations that includes:
 - Species identification, monitoring, and surveys
- o Cultural competency
 - Ability to work in a variety of cultural environments
 - Ability to work with persons whose first language is not English
- o Ability to work in teams and independently
- Desired skills (bonus but not mandatory):
 - o Drone operator license
 - Climbing skills or rope skills
 - o Experience travelling and/or working in the global south
 - o Experience doing research on primates in the wild (or equivalent)
- Language requirements.
 - o Fluency in reading/writing English (Required)
 - French reading/writing (Optional)

8. Application Materials

- CV
- Cover letter or statement of interest (max 1 page)
- Academic transcripts (unofficial for now official transcripts will be requested at a later date)
- Names of 2 Referees these will not be asked to provide a reference letter unless you have been shortlisted for an interview.
- Writing sample or portfolio.

9. Application Process

- Deadline:
 - o November 30, 2025: Internal LEMR lab deadline
 - Interviews will be conducted in second week of December
 - o January 2026, Department Geography Online application
 - GEOG PhD Application FAQ

https://geg.uoguelph.ca/graduate/application-process

- How to apply:
 - o Email application materials to tssteffen@uoguelph.ca
- Contact person for inquiries
 - o Travis Steffens, tsteffen@uoguelph.ca

10. Equity, Diversity & Inclusion Statement

• The LEMR lab values diversity encourages applications from all persons regardless of background and including those underrepresented in academia. Not all people have the same opportunities and thus experience. While there is a minimum expectation for student achievement for acceptance to this position, we encourage applicants to consider potential equivalencies to the above 'Essential' and 'Desired' skills. The lab encourages all candidates to speak with current lab members learn more about the work environment. Interviews may be conducted interviews in person, at conferences, or virtually to provide equitable access to a diverse array of applicants.

11. Other

- There will be opportunities for local, national, or international conference presentations.
- There will be opportunities for within lab, between lab, and international collaborations.
- The LEMR lab field site is in Ankarafantsika National Park.
- Students will have access to over 15 years of data collection on species occurrence
- The lab and University of Guelph encourages and provides support for career development.