

Technical Advisor: GIS and Ecosystem Monitoring, Serengeti National Park

Job Description

We are seeking a capable individual to facilitate an ecosystem monitoring program for the Serengeti National Park. The primary objective of the position is: (a) to create geo-databases that collate core information about the people, wildlife and landscapes of Serengeti ecosystem that will be used to facilitate the decision making processes by park management, and (b) to provide on-the-job GIS/RS training for staff members from Tanzania National Parks (TANAPA) and Tanzania Wildlife Research Institute (TAWIRI). The successful applicant will develop systems by which several large-scale datasets pertaining to the management of the Serengeti can be summarized through a self-sustaining system for collecting and disseminating spatial data for park management. Additionally, the candidate will facilitate the collection of new datasets and will integrate this diverse information into a comprehensive GIS system established by the park.

The position is funded through an award to the University of Glasgow and hosted by in-country partners; TANAPA, TAWIRI, and the Frankfurt Zoological Society (KfW funded community outreach initiative).

Duties and responsibilities

- Develop geo-databases in collaboration with TANAPA's GIS Department that fulfil the objectives of the monitoring and evaluation priorities for the ecosystem. Priority areas are:
 - Land-use change
 - Vegetation mapping
 - Spatial and temporal patterns of precipitation and hydrology
 - Fire return intervals and seasonal burn scaring
 - Human population growth
 - Socio-economic indicators of human livelihood
 - Livestock densities and trade
 - Ranger-based monitoring systems (specifically, integrating with SMART)
 - Animal census data
 - Invasive plants
 - Tourism & visitor numbers
- Provision core data products that facilitate the adaptive management policies of the park (such as maps and reports summarizing changes in the key ecological attributes and human socio-economic indicators)
- Develop and implement a system of routine reporting that aggregates data in a format that can be easily used by managers
- Train TANAPA and TAWIRI staff in using GIS/RS especially for reporting
- Assist in a large scale GPS collaring program of migratory animals
- Mentor and assist on-job training, MSc and PhD students

Qualifications of the ideal candidate:

- Preferably education to MSc or PhD level, but emphasis will be on professional track-record
- Proven capacity in developing GIS and RS geo-databases
- A solid understanding of ecological methodology, principles and processes
- Experience working with agro-pastoral communities and socio-economic data
- Database design and implementation (including queries, metadata, and standards)

- Statistical analyses (preferably with quantitative skills in R)
- Excellent communication skills particularly between researchers and managers (KiSwahili is a clear bonus)
- Capacity to coordinate and interact with a diverse inter-disciplinary team of people
- Experience in mentoring and facilitating graduate students

Working conditions and physical requirements

- Station will be in the Serengeti National Park (Seronera or Ft Ikoma)
- Office space provided by TANAPA GIS Department and Serengeti Wildlife Research Centre (TAWIRI)
- Remote conditions with solar power and rain-water collection, but beautiful scenery and animals guaranteed (!)
- Return air-fare every year, medical insurance, and 1 month annual leave
- Remuneration: USD \$18,000 – 30,000 / annum depending on qualifications
- The applicant will be assessed after a 6-month probationary period leading to a 2 year contract.

Applications:

- Please provide a short letter of motivation (approximately 500 words), your CV outlining previous work experience, and 2 referral letters highlighting your professional skills.
- Deadline for applications is July 3, 2015
- Applications should be sent to grant.hopcraft@glasgow.ac.uk

Project coordinators:

Dr. Grant Hopcraft (University of Glasgow)

Prof Markus Borner (University of Glasgow)

Dr. Fortunata Msoffe (Tanzania National Parks)