

MSc opportunity:

Time Budgets and Foraging Ecology of South African Giraffes (*Giraffa camelopardalis*) at Two Locations in KwaZulu-Natal, South Africa

CLOSING DATE: 17 November 2024

We invite applicants for the above full-time MSc position (starting January 2025) offered at the University of Kwa-Zulu Natal, Pietermaritzburg campus. The research should provide a solid scientific foundation for evaluating how giraffes adapt to novel environments, information that ought to be useful for assisting in conserving this iconic species currently considered to be in danger of extinction.

The candidates will be supported by a Graduate Student Fellowship funded by the Anne Innis Dagg Foundation. They will be registered at the University of KwaZulu-Natal School of Life Sciences under the supervision of Prof CT Downs, SARChi Research Chair in Ecosystem Health and Biodiversity. All laboratory work will be based at the University of KwaZulu-Natal, and all fieldwork will be undertaken in KwaZulu-Natal Province.

Background: Giraffes (*Giraffa camelopardalis*) are classified as “Vulnerable” to extinction on the IUCN Red List. In an effort to mitigate the downward trend in population numbers, translocations of individuals have been undertaken that bring giraffes to new habitats, a process akin to ‘not having all your eggs in one basket’. The fundamental basis for these translocations is to establish viable breeding populations. However, achieving this goal is dependent upon the introduced giraffe population adopting to a novel habitat, as well as breeding and creating a sustainable population. Giraffes are browsers subsisting on over 100 species of plants in Africa, but they concentrate on less than a dozen species in specific locations. In KwaZulu-Natal, one introduced population of giraffes resides at the Ukuwela Nature Reserve, while a separate and distinct population resides in the Zingela Conservation Area.

This project will compare the time budgets and feeding behaviour of individuals living in these two populations. The bedrock for this study is based upon addressing two fundamental issues in conservation biology: (1) how do animals adjust their time budgets and feeding activities, as well as group structure and composition, as a function of seasonal changes in resource availability, and (2) what social, demographic, and ecological factors influence animal growth rates and reproductive output? Providing answers to these questions ought to enable conservation managers to augment efforts at saving this magnificent species.

The Anne Innis Dagg Foundation (<https://anneinnisdaggfoundation.org/>) is funding two MSc graduate student fellowships for this project. In addition, one year MSc tuition remission for full-time MSc candidates is available from UKZN. We invite applications from South African citizens. Each applicant must have an excellent academic record, a BSc (hons) in Zoological or Ecological or Environmental Sciences, physical mobility and good health to carry out fieldwork, as well as an ability to participate in fieldwork as a team member. Experience in laboratory work, statistical data analyses and scientific writing will be favoured. The candidate(s) will conduct field research, systematically collect data on giraffe feeding and ranging activity, obtain samples of dietary items for nutritional analysis, and survey the flora to provide a baseline regarding possible dietary selectivity. The candidate(s) must display a high level of self-motivation.

TO APPLY, PLEASE SEND: your full CV, academic record, the names and contact details of two referees, and a 1-page motivation letter to Preshnee Singh (Email: SinghP7@ukzn.ac.za), research assistant of Prof. Colleen T. Downs by **17 November 2024**. Enquiries and details regarding this post may be directed to Prof. Colleen T. Downs at Downs@ukzn.ac.za.

Candidates from historically disadvantaged backgrounds are especially encouraged to apply.