

## **Options for MSc or MRes Studies with Carnivore Research Malawi 2023-4 in Malawi**



All study options will take place in Malawi under Carnivore Research Malawi.

Students are encouraged to register their MSc with the University of Bath, UK.

CRM does not have funding for MSc/PhD projects, students may be able to borrow equipment and vehicles during their project but must cover all their own project related expenses.

If you are interested in these or other project ideas, please contact Dr Emma Stone on [els201@bath.ac.uk](mailto:els201@bath.ac.uk)

[www.carnivoreresearchmalawi.org](http://www.carnivoreresearchmalawi.org)

### **1. Occupancy/Co-occurrence and diet of carnivores in Afromontane rainforest on Mulanje Mountain Biosphere Reserve.**

Nothing is known about the distribution and abundance of carnivores on Mulanje Mountain Biosphere Reserve (<https://www.malawianstyle.com/our-destinations/malawi-points-of-interest/mount-mulanje/>) and this information is needed to inform conservation management. This study will involve using camera trapping, diet and occupancy analysis in the highly biodiverse Afromontane rainforest on Mount Mulanje.



We are working in partnership with Mount Mulanje Conservation Trust to provide vital data for biodiversity on the reserve and you will be based at our camp located just up the mountain, about 25mins from Lujeri tea estate.

Mulanje is a beautiful site, located just south of Blantyre, it has high biodiversity and is part of the protected [Mulanje Mountain Forest Reserve](#). The native [Mulanje cypress](#) (*Widdringtonia whytei*) has been so heavily logged that it is considered

endangered and the park contains the last remaining stands of this tree, as well as a high diversity of plants and animal species. There are many endemic species in Mulanje including forest butterflies, birds such as the [cholo alethe](#) and [white-winged apalis](#), a dwarf chameleon, [geckos](#), [skinks](#), the squeaker frog, and a rare limbless burrowing skink species.



You will set sticky bait stations to collect hairs from leopard for population estimates using genetic techniques, also conduct an intensive camera trapping and scat survey of the area. This is fairly remote study site located in high Afromontane rainforest, therefore the student will need to have experience of working in remote environments.

Students will need to be fit, able to drive, in remote environments and be able to work unsupervised. The student will have to contribute to costs of some cameras, own fuel costs, camera batteries and potentially genetic costs.

Students are encouraged to register their study with the University of Bath, England to complete this project.

## **2. Occupancy, den use and diet of hyaena in Thuma Wildlife Reserve (MSc or MRes)**

This study requires the student to pay for their own flight, accommodation and subsistence during the field season.

Very little is known about the distribution and abundance of carnivores in Thuma Forest Reserve (TFR) (<https://www.wildlifeactiongroupmalawi.org/>) and this information is needed to inform conservation management. TRF is covers an area of roughly 19700 ha (197 km<sup>2</sup>) in the Great Rift Valley Escarpment near Lake Malawi, approximately 80 km from Malawi's capital Lilongwe. Thuma is one of a few forest reserves in Malawi which is still home to elephant and buffalo.



This study will involve using camera trapping, fecal diet analysis and occupancy analysis in the remote Thuma Forest Reserve. You can also set sticky bait stations to collect hairs from leopard for population estimates using genetic techniques.

This is a very remote study site therefore the student will need to have experience of working in remote environments. The student will have to contribute to own fuel costs, camera batteries and accommodation at the Thuma research camp.



Students are encouraged to register their study with the University of Bath, England to complete this project.

### **3. Density and relative abundance of carnivores in Lilongwe City (MSc or MRes)**

This study requires the student to pay for their own flight, accommodation and subsistence during the field season.

Very little is known about density and distribution of urban carnivores in Africa. Lilongwe city has an abundance population of carnivores including spotted hyaena, serval and jackal. Information is needed regarding the abundance and distribution of these urban populations to inform urban conservation planning and human wildlife conflict management. This study will involve systematic camera trapping and spotlighting in urban environment in Lilongwe City, Malawi.



Based at our Urban Research Centre in Lilongwe City working with the CRM urban hyaena team, you will monitor den use by spotted hyaena, analyse GPS fixes from collar data, conduct diet analysis and assess clan composition and change.



You can focus on spotted hyaena research or work on general carnivore species. Funding would be needed for some fuel and cameras. Camp is very comfortable based just outside the city centre on a lovely property at Barefoot Safari Lodge.

### **4. Abundance and distribution of carnivores inside and outside Kuti Wildlife Reserve (VWR) (MSc or MRes)**

This study requires the student to pay for their own flight, accommodation and subsistence during the field season.

Very little is known about the distribution and abundance of carnivores in Malawi and this information is needed to inform conservation management. This study will involve using camera trapping and occupancy analysis at the CRM field station in

Vwasa Marsh Wildlife Reserve. The student will need to contribute costs of some cameras, cover their own fuel costs and camera batteries.

### **5. Abundance, distribution and spatial ecology of urban hedgehogs in Lilongwe City (MSc or MRes)**

This study requires the student to pay for their own flight, accommodation and subsistence during the field season.

Very little is known about the distribution, abundance and ecology of hedgehogs in Africa, particularly in urban environments. This information is needed to inform conservation management. This study will involve using camera trapping, marking, transects, hog foot print tunnels and GPS/radio tracking of hedgehogs at night in Lilongwe City from the Urban Research Camp in Lilongwe. The student will need to contribute costs of some radio tags, and will need to be available for training in tagging and capture of hogs at our collaborators research centre in Nottingham Trent University. Students will need to cover their own fuel costs and camera batteries.



#### **Conditions:**

Students are encouraged to register their studies with the University of Bath England, UK, or if based at an alternative university student will be co-supervised by Dr Emma Stone.