

Progress report

Title of Application: Extinct or just shy? A quest to find two of the least known skinks in East Africa.

Name of leader: Harith Farooq

The grant has been received by the Faculty of Natural Sciences at Lúrio University on January 7, 2021.

The main methodological approach of the project:

An unprecedented one year long trapping of amphibians in reptiles in one sampling site in order to find two lizards not see in almost 100 years.

Instagram: eos_lumbo Website: http://www.extinctorshy.org/

Conducted activities

Step 1: Selection of students

We Interviewed candidate students to conduct the sampling for the first 6 months – completed

Students selected: Ali Luciano Puruleia, Wilson Monia, Abdurabe Yamal.

(A new set of students will be selected to conduct the remaining 6 months of the sampling).



Figure 1: Selected students upon arriving at Lumbo.

Step 2: Acquire traps

A collaborator, Luke Verburgt donated his trapping system. This is especially relevant since his trapping system was able to collect a sister species of our target species.

Step 3: Training students

The trapping training was conducted at the Faulty of Natural Sciences at Lúrio University, located in Pemba, Mozambique, between 30 and 31 of March 2021.



Figure 2: A selection of images illustrating the training process for the students participating in the project. We conducted both theoretical and practical sessions before starting with the fieldwork.

Step 4: Sorting logistics

We found cheap accommodation for the students in Lumbo (Fig. 3) so instead of camping, they can stay in a proper house and concentrate on their fieldwork.



Figure 3: Image of the housing we are renting for the whole duration of the 365-day long sampling.

The trapping systems are 10km apart, and the students visit these traps twice a day. So we managed to sort out a free of charge bicycle, so the students don't have to walk the whole distance daily.

We have also introduced our team and research project to local authorities. Attached here the stamped credentials (Appendix).

Step 5: Mounting the trap

In total, 4 trapping systems are mounted in our study site.



Figure 4: The location of the trap placement.



Figure 5: The habitat type where the traps were placed.

Table 1: Location of the pitfall trap arrays

Site	Latitude	Longitude	Habitat description
Extinct or Shy1	-15.033025	40.664418	Wetland with trees and leaflet
Extinct or Shy2	-15.052409	40.642038	Wetland with trees and leaflet
Extinct or Shy3	-15.055964	40.672013	Wetland with few trees and leaflet
Extinct or Shy4	-15.066722	40.689839	Wetland with trees and leaflet

Results:

We have already collected and photographed 21 species. More importantly, we have collected a range of fossorial species such as *Hemisus marmoratus (Fig. 6)*, *Mochlus sundevalli (Fig. 7)*, *Myriopholis longicauda (Fig. 8)*, *Apparalactus capensis (Fig. 9)* and *Atractaspis bibronii(Fig 10)*. We have also been able to collect a rare skink, of the species *Trachylepis megalura*. This species has only two records in the country. One of them is precisely from our sampling location and from an expedition in 1918, by Arthur Loveridge. It was exactly that expedition that found the lizards that we are now trying to find. Finally, we have also created an Instagram account to report our progress using the photographs we have been taking daily from our trapping systems. The account can be reached at eos_lumbo.



Figure 6: Hemisus marmoratus, a fossorial frog that our trap system caught.



Figure 7: Mochlus sundevalli, a fossorial skink found inside one of our traps.

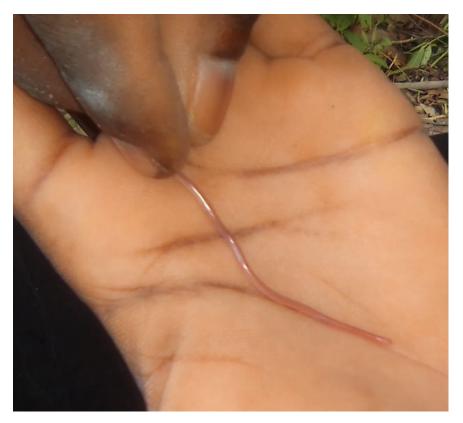


Figure 8: Myriopholis longicauda, a fossorial and harmless fossorial snake



Figure 9: Apparalactus capensis, this centipede-eater is a hard-to-find fossorial snake.



Figure 10: Atractaspis bibronii, a dangerous snake capable of causing cytotoxic bites.



Figure 11: Trachylepis megalura, a species found more than a year before during the same expedition where our target species was collected last time in 1918.

Identifications

Trachylepis megalura (Peters, 1878) Animalia Chordata Reptilia Lepidosauromorpha Squamata Sauria Scincidae Trachylepis megalura Grass-top skink; Long-tailed skink Identified by José Rosado Nature of ID: expert ID
Mabuya megalura Animalia Chordata Reptilia Lepidosauromorpha Squamata Sauria Scincidae Mabuya megalura Identified by Catalog Nature of ID: migration Remarks: Catalog/1997

Locality and Collecting Event Details

Africa		
Mozambique		
Lumbo		
Lumbo,PEA		
wild caught		
-15.031667° 40.669722° (Datum: WGS84) , Error: 2530 m		
Cleo Falvey; 2020-05-27; Source: GEOLocate		
18/11/1918-18/11/1918 (1918-11-18)		

Collectors

Arthur Loveridge

Figure 12: The collected specimen is at the Natural History Collection at Harvard

Constraints:

We don't own a photographic camera. We have been reporting our findings using a phone camera.

Appendix:

SDAC UNIVERSIDADE LÚRIO GABINETE DO DIRECTOR N* Ref .../UNILURIO/GD/2021 PARA: Lumbo- Ilha de Moçambique ASSUNTO: Saída de Campo No âmbito saída de campo no âmbito do Projeto Extint or Just Shy , com objectivo de Montar armadilhas de queda para captura de Anfibios e repteis e ainda montagem de armadilhas fotográficas para de mamíferos de pequeno e medio porte projeto Extint or Just Shy., vimos por esta via solicitar os bons oficios da V.Excia que se digne a mandar autorizar os docentes e estudante conforme a lista em anexo. De referir que a viagem está marcada para o dia 11 a 15 de Março de 2021. Pedimos igualmente as V. Excias, para que concedam o apoio necessário para efetivação do trabalho. Por ser verdade, emitimos a presente credencial que vai assinada e autenticada com carimbo em uso nesta Universidade Com os melhores Cumprimentos. Pemba, 06 de Abril de 2021. O Director da Faculdade APresentado neste Scanned with CamScanner