

Biodiversity Challenge Funds Projects Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus Half Year Report

Note: If there is any confidential information within the report that you do not wish to be shared on our website, please ensure you clearly highlight this.

Submission Deadline: 31st October 2022

Project reference	DARCC009
Project title	Strengthening conservation and management capacity in Tanzania through collaborative research
Country(ies)/territory(ies)	Tanzania
Lead partner	Lion Landscapes
Partner(s)	WildCRU (University of Oxford), Tanzania Wildlife Management Authority (TAWA), Frankfurt Zoological Society (FZS) Tanzania, Southern Tanzania Elephant Program (STEP)
Project leader	Dr Charlotte Searle
Report date and number	HYR1
Project website/blog/social media	https://www.lionlandscapes.org/ https://twitter.com/lionlandscapes https://www.instagram.com/lionlandscapes/ https://www.facebook.com/lionlandscapes

1. Outline progress over the last 6 months (April – Sept) against the agreed project implementation timetable (if your project has started less than 6 months ago, please report on the period since start up to end September).

Activity 1.1 & 2.4: Training & establishment of large carnivore monitoring teams

Lion Landscapes (LL) has been delivering in-depth training in large carnivore research and monitoring through this project since 30 July 2022. The activities in Selous-Nyerere are part of a 2020-2022 large carnivore assessment, while activities in Ruaha-Rungwa will be used to monitor LL and STEP's conservation & protection activities in the study area.

From 30 July to 23 August, in-depth training in sign-based (spoor) surveys was delivered to one TAWIRI researcher, three TANAPA rangers, and two LL staff members by project member Dr Paolo Strampelli. Condensed training was also provided to two TANAPA ecologists. From 24 August, data collection for these surveys was handed over to a completely Tanzanian team comprised of training participants and led by TAWIRI researcher Leonard Haule, who has gone on to train a further three TANAPA rangers and one LL staff member. Up to 23 August the team completed 317km of survey transects, and up to end of September the all-Tanzanian team completed a further 557km.

In-depth training has also been provided in camera trapping by Dr Charlotte Searle. In Selous-Nyerere, training in camera trap survey set-up and checks has been delivered to three TANAPA ecologists and four TANAPA rangers through two grids in Nyerere National Park, together totalling 83 paired camera trap stations. An all-Tanzanian team comprised of training participants and led by TANAPA ecologist Germanus Hape will independently check and take down one of these grids in Q3.

In Ruaha-Rungwa, training is being delivered through a grid of 40 camera trap stations in MBOMIPA Wildlife Management Area. Through this effort, training in camera trap set-up and checks was delivered to four LL staff members, three STEP staff members, and ten MBOMIPA

village game scouts. An all-Tanzanian team led by LL project assistant & data manager Joseph Francis – hired in September 2022 – will independently check and take down this grid in Q3. The guide sightings programme has also been continuing in Ruaha National Park.

Activity 1.2: Analytical training workshops

In April 2022, LL held an analytical training workshop in Dar es Salaam in partnership with partner Frankfurt Zoological Society. Participants in the ongoing carnivore assessment and training were invited to attend the workshop; this included three TAWA ecologists, two TANAPA ecologists, and one TAWIRI researcher.

During the workshop, Dr Charlotte Searle and Dr Paolo Strampelli delivered training on how systematic camera trapping and spoor data can be employed to estimate population density of large carnivores. After a presentation on the theoretical background for the analyses, workshop participants learnt how individually identify lions and leopards from camera trap images, and how to estimate population density from the individually identified camera trap data via spatially explicit capture-recapture (SECR) modelling in program DENSITY. Participants were also taught how to estimate density and abundance via spoor count analysis. Booklets with step-by-step instructions for completing these analyses were prepared and given to attendees.

Activity 2.1: MSc and PhD students

One female MSc student from University of Dar es Salaam is currently carrying out research with LL, using project data from the guide sightings programme in Ruaha National Park. She is using lion sightings data to estimate population density (one of the first applications of SECR modelling to this data type), explore population demography, and investigate the value of citizen science for carnivore monitoring. Project leader Dr Charlotte Searle is providing supervision, and the research is expected to be completed in early 2023.

LL has supported a second MSc student – who participated in the 2020-2021 training and research activities this Darwin project builds upon – to secure scholarship funding for his Master's programme, which will commence in early 2023. This student, who is Head Ecologist for TAWA in Selous Game Reserve, will be a leading member of the carnivore monitoring team in Selous-Nyerere, and will use the data collected to study wild dog ecology. LL is also supporting another training participant from TAWIRI in his efforts to secure scholarship funding for a PhD in 2023. This prospective student is currently leading the spoor team in Nyerere National Park, and will be a leading member of the Selous-Nyerere carnivore monitoring team.

2. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

1 Project member leaving

One project member (Dr Paolo Strampelli), who was previously planned to dedicate 50% of his time to the project for its whole duration, left his position with LL at the end of August 2022 (Y1Q2). His responsibilities for the project have been taken over by Ana Grau, who has worked for LL in Tanzania since 2017. In July 2022, we submitted a change request to reflect this staff change. This has been approved, pending final approval of some unrelated adjustments to the project log frame, which were submitted as part of the same change request.

2 Falling value of GBP

Another major development with implications for the project is the falling value of the pound. At the time of application (07/12/21), 1 GBP was worth 1.3246 USD / 1.1751 EUR / 3047 TZS; at the time of writing this report (18/10/22), 1 GBP is worth 1.1334 USD / 1.1486 EUR / 2641 TZS. As a result, the funding secured is effectively worth less now than it was at the time the project budget was prepared. As the departure of one project member freed up funding that had previously been allocated for a portion of his salary, we were able to accommodate these exchange rate changes by requesting to reallocate this funding across other budget lines.

3 Delays with collaring permits

One of the planned activities under this project is to deploy GPS collars on lions and wild dogs in Ruaha-Rungwa and Selous-Nyerere, as part of research and monitoring & training in the two project sites. In order to deploy wildlife collars in Tanzania, specific collaring permits must be secured in addition to the overarching research permits. While we were granted our overarching research permits in July 2022 (valid until July 2023), there have been unexpected delays to the collaring permit process. While we have been following up on this with the relevant authorities (TAWIRI & COSTECH), it is unclear if and when the necessary permissions will be granted. As a result, it is unclear whether any of the planned collaring will be able to be carried out in Y1, particularly as rains will prevent us from deploying collars from December to January.

If the collaring has to be delayed to Y2, so too will the associated costs (travel and subsistence – fuel; operating costs – fieldwork allowances, associated expenses). However, we would be able to accommodate this without a change to the annual budget by bringing forward the purchase of collaring equipment of the equivalent value currently scheduled for Y2. We will submit a change request if required as soon as possible (prior to 31 December 2022), once we have clarity on this issue and the timeline.

3. Have any of these issues been discussed with NIRAS-LTS International and if so, have changes been made to the original agreement?

Discussed with NIRAS-LTS:	Yes (1 & 2)
Formal Change Request submitted:	Yes (1 & 2)
Received confirmation of change acceptance	We have received informal confirmation
Change request reference if known:	Unknown

4a. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

4b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a re-budget Change Request as soon as possible. There is no guarantee that Defra will agree a re-budget so please ensure you have enough time to make appropriate changes if necessary. Please DO NOT send these in the same email as your report.

5. Are there any other issues you wish to raise relating to the project or to BCF management, monitoring, or financial procedures?

No

If you are a new project and you received feedback comments that requested a response (including the submission of your risk register), or if your Annual Report Review asked you to provide a response with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also be raised with NIRAS-LTS International through a Change Request. **Please DO NOT send these in the same email.****

Please send your **completed report by email** to BCF-Reports@niras.com. The report should be between 2-3 pages maximum. **Please state your project reference number, followed by the specific fund in the header of your email message e.g. Subject: 29-001 Darwin Initiative Half Year Report**