



Darwin Initiative: Half Year Report

(due 31 October 2014)

Project Ref No	20-012
Project Title	Improving anti-poaching patrol evaluation and design in African rainforests
Country(ies)	Cameroon
Lead Organisation	Wildlife Conservation Research Unit (WildCRU), University of Oxford
Collaborator(s)	Cornell University (CU), James Madison University (JMU), Korup Rainforest Conservation Society (KRCS), Coastal Forests Program of WWF-Cameroon (WWF-CFP), Programme for the Sustainable Management of Natural Resources – Southwest Region (PSMNR-SWR), Ministry of Forest and Wildlife (MINFOF)
Project Leader	Prof. David W. Macdonald
Report date and number (eg HYR3)	31/10/2014 – HYR2
Project website	http://bioacousticmonitoring.wordpress.com/

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

According to the project's timetable, the actions scheduled for the reporting period (Year 2: Q1 + Q2) were towards all three of the project's anticipated Outputs – 1) Development of Anti-poaching Evaluation and Design Protocol, 2) Understanding Poaching Patterns in the Study Region and 3) Critically Examining Anti-Poaching Design and Evaluation Strategies in Central Africa.

Towards Output 1, we continued collecting acoustic monitoring and line transect data on gun hunting intensity (Action 1.2 – started on June 2013) without problems. We have now >15 months of continuous acoustic data from the 15 sensors and have analysed the gunshot data for the baseline first year. Preliminary analysis of the results was presented to the Korup National Park management team and all Cameroon-based DI project partners, in mid-July by the project coordinator (C. Astaras). We continue progressing with the development of the species specific detection algorithms (Action 1.3, as reported in Year 1 report). During the mid-July workshop held in Buea, Cameroon, the DI partners discussed and agreed on the adoption of a new rigorous anti-poaching patrol protocol (Action 1.5) that was rolled out in the field on August 2014. Comparing the first year's baseline data on gun hunting data with the ones from Year 2 after the adoption of the new patrolling protocol, we will be able to evaluate the efficiency of anti-poaching patrol strategies and therefore proceed – in collaboration with Dr Niki Trigoni's lab (University of Oxford) – with the development of patrol optimization algorithms (Actions 1.5 – action pushed forward a few months to allow for the collection of at least a few months of field data under the new patrol protocol). Regarding Action 1.9 (the training of Korup National Park management staff in maintaining the acoustic monitoring grid and analysing the data) we are progressing ahead of schedule. Dr. Peter Wrege (Cornell University) and Dr. Christos Astaras (WildCRU, University of Oxford) are to deliver the relevant training workshop on Dec. 8-12, in order to allow sufficient time for practical experience of the Korup NP's staff along the DI field team in the months ahead.

Importantly, DI partners have been spearheading a review of the Korup NP's wildlife monitoring strategy and anti-poaching strategy documents, ensuring that the lessons learned already from

the first year of the project are incorporated in them, and that acoustic monitoring for wildlife and anti-poaching design and evaluation are at the core of the updated strategies. This has been an important indicator of achieving outcome 1 – the adoption of the project’s anti-poaching protocol after the completion of the project.

Towards Output 2, we have continued the socioeconomic surveys (Actions 2.1-2.4) as planned. Although a preliminary analysis has been shared with the project partners in July, we intend to further examine our data in lieu of the ebola outbreak in West Africa which had ripple effects on bushmeat consumption in Korup region. For instance, there was a marked decrease in bushmeat consumption in local communities for a brief period in August 2014, and we want to examine closely the effect that this could have on our DI project data interpretation, but most importantly also on the effect of similar developments in the future on tackling the bushmeat crisis.

Towards Output 3, the project website has been developed, so information on the preliminary findings of the study and the relevant protocols (Action 1.6) can be shared with the international community via it (Action 3.1). We have started planning for the Year 3 workshop (Action 3.3.) and significant more progress is expected following the December 2014 training workshop, at which time we will discuss with all partners and decide on the workshops timing and potential list of participants.

Finally, we have finalized the paperwork for expanding our acoustic monitoring network (as discussed in Year 1 report) in the near by Rumpi Hills Wildlife Reserve with the support of USFWS, and are about to deploy the sensors.

2a. Give details of any notable problems or unexpected developments 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.

We plan to conduct further control gunshots in Korup region in December to improve our confidence in the detection range of gunshots by our sensors. This is not a problem. The development of the detection algorithms for the diurnal primate species is still ongoing, which is a challenge that we have reported before, but we are progressing (and Peter Wrege’s field visit in December will help with progress in this field). Finally, the ebola outbreak resulted in a sudden but shortlived dip in the bushmeat consumption (and therefore almost certainly demand→hunting pressure) in the region, because the Nigerian markets typically supplied by Cameroonian traders were effectively shut down for some time, closing that market to the hunters. Although this could complicate interpretation of 1-2 data of our results, we are well placed with our bushmeat price, hunter and household surveys to measure this effect and indeed make some interesting observations of broader relevance for conservation.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS:	Yes/No
Formal change request submitted:	Yes/No
Received confirmation of change acceptance	Yes/No

3a. Do you currently expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully as it is unlikely that any requests to carry forward funds will be approved this year. 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 and would like to talk to someone about the options available this year, please indicate below when you think you might be in a position to do this and what the reasons might be:

n/a

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

No.

If you were asked to provide a response to this year's annual report review 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 LTS International through a Change Request.**

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 20-035 Darwin Half Year Report**