

Darwin Initiative: Half Year Report
(due 31 October 2011)

Project Ref No	DAR17-031
Project Title	Ecological sustainability of leopard trophy hunting in Zimbabwe
Country(ies)	UK, Zimbabwe
UK Organisation	WildCRU, Oxford University
Collaborator(s)	Zambezi Society, Zimbabwe Parks and Wildlife Management Authority
Project Leader	Dr Andrew J Loveridge
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Project website	http://wildcru.org/research http://www.zamsoc.org

1. Outline progress over the last 6 months (April – September) 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).

Training

A training workshop was hosted at Hwange National Park from the 9th to the 13th of May 2011. The training workshop objective was to train stakeholders in the conservation industry in carnivore management and monitoring techniques especially focusing on leopards. Trainees from the Rural District council through CAMPFIRE association and trainees who manage protected areas were represented through ZPWMA and the Forestry Commission. The training workshop consisted of a theory and a field study on identifying and measuring spoor. The following topics were covered;

- Overview of leopard population biology
- Distribution of leopards in Africa and Zimbabwe
- Overview of techniques used in monitoring carnivores
- Why studying/ monitoring leopards
- Discussion on use of spoor transects as a technique to monitor animals including leopards
- Differences between leopard spoor and other cats' spoor
- Leopard identification and aging- in the field
- Aging and sex determination from spoor
- Trophy size estimates using spoor
- Spoor data collection and analysis

A spoor survey training manual was compiled and disseminated to all the field stations.

Leopard population surveys

Surveys of leopard populations started in the Northern Region of Zimbabwe. Spoor data was collected in Mana Pools National Park, Nyakasanga Safari Area and Hurungwe Mkwichi. The areas represent three different land use types of protected areas i.e. National Park, Safari area and Communal (CAMPFIRE) area. We have done an average of about 150 kilometres of transect length in each area.

Detailed study of a hunted leopard population

This study is being conducted in Buby Valley Conservancy. In 2011 an additional 5 leopards and 3 lions were captured and GPS radio-collared, taking the total number of collared animals to 15 leopards and 5 lions. One leopard that was captured in 2010 was recaptured and had a faulty collar replaced. Unfortunately, 1 lion and 4 leopard collars have failed so far, and 3 collared leopards have died after fighting with other leopards. From the collar data, male leopards have an average home range of 180 km², and females 40 km². The collar data also shows that leopards tend to avoid lions, and seek the shelter of denser riverine vegetation when lions are present.

A 50 day baited camera-trap survey of leopards was conducted in both the Mazunga and Kwalusi study sites. In total 22,365 photographs of leopards were recorded in the surveys, and these were each

individually identified, resulting in 9 males, 15 females and 3 small cubs in the Mazunga site where lions are present, and 8 males, 14 females, 6 small cubs and 7 juveniles in the Kwalusi site where lions are excluded. From the difference in the number of cubs, and the total lack of juveniles where lions are present, it is apparent that lions at high density impact negatively on leopard population reproduction and recruitment.

The annual spoor transects were carried out for the third time. This data is yet to be analysed, but any trends in population density changes over time will start becoming apparent, particularly that of leopards as the lion population increases. Genetic samples are continued to be collected from captured animals, and any that have been shot as trophies by hunters.

Technical Workshop

A technical workshop for all the leopard researchers and the wildlife management authority was held at Sethule Lodge in Bulawayo on the 18th of August 2011. Presentations were made by 5 research projects working on leopards in the country. The workshop discussed the possibility that a formal CITES non detriment finding assessment meeting be held to reassess leopard CITES quotas, as a lot of information is now available through this and other projects to revise leopard management in Zimbabwe.

Awareness

We have made posters and fliers for the national leopard survey in all the three local official languages to raise awareness. The posters and fliers are being distributed to all the areas with leopards in Zimbabwe. We are working on a leopard DVD that will be circulated in all areas to raise leopard awareness. We are also working on a leopard documentary that will be aired on the local television and published in a local newspaper.

2. 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.

The spoor surveys started late because there was no vehicle. However, TOYOTA Zimbabwe donated a vehicle for the project on a long term loan. The spoor survey data collection though it started late it is now on schedule.

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

Discussed with LTS: NO no/yes, in..... (month/yr)

Formal change request submitted: NO , in.....(month/yr)

Received confirmation of change acceptance no/yes in.....(month/yr)

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

Yes No

If yes, and you wish to request a carryforward of funds, this should be done as soon as possible. It would help Defra manage Darwin funds more efficiently if you could give an indication of how much you expect this request might be for.

Estimated carry forward request: £

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

NO