Darwin Initiative

Half Year Report (due 31 October each year)

PLEASE NOTE: Due to the increased number of reports expected in 2005, we <u>will not be able to</u> <u>confirm receipt of reports</u> but will contact you individually should any questions arise

Project Ref. No.	13/001
Project Title	Conservation of wetlands and associated biodiversity in Northern Zambia
Country(ies)	Zambia
UK Organisation	University of Aberdeen
Collaborator(s)	Kasanka National Park (KNP)
Report date	31 st October 2005
Report No. (HYR 1/2/3/4)	2
Project website	u/a

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).

<u>Darwin trainee</u>: Patricia Mupeta returned to Zambia 2^{nd} May – 5^{th} July to carry out the research for her MSc project which investigated the potential for increasing school visits to KNP. Her thesis, entitled "Achieving Ecotourism Goals Through Educational Tourism and Conservation Education" has now been submitted to the University of Kent and her MSc in Tourism and Biodiversity is thus completed. Patricia and Martin Stanley of the Holly Hill Trust visited Aberdeen in September to discuss next steps in increasing school visits. KNP are currently considering an offer by the Holly Hill Trust to fund a project to follow up Patricia's suggestions.

Despite welcoming our offer at the first stakeholders workshop, ZAWA failed to identify a second candidate to apply for the MSc in Tourism and Biodiversity at DICE. The offer will remain open but we will also seek to identify our own candidate for the final year of the project.

<u>Guide training</u>: Bob Sjornstedt spent 10 days on guide training in KNP and prepared notes for trainees. KNP recruited a new resident guide, Lesley Reynolds, who is following up Sjornstedt's work with eight trainees.

<u>Community relations:</u> Repairs to the forestry officer's house (funded by the project) have been completed, although a forestry officer has not yet been recruited. However the house is currently occupied by the Community Resource Board Coordinator who is a key figure in the local community.

<u>Appointment of research assistant:</u> Adverts for the post of research assistant for Dr Kennedy were placed in two Zambian papers, the Post and The Times, during September. Eleven applications were received. Copies of the advert were circulated to ZAWA, who were invited to identify suitable candidates, but no applications were forthcoming. Four candidates have been shortlisted, and will be interviewed during late October. In the meantime an intern biology student from Germany will be assisting with fieldwork.

Hydrological Investigations

During Dr Kennedy's visit to Kasanka in May, a pilot study was undertaken to establish the hydrochemical characteristics of waters within the National Park. The chemical properties of

natural waters can be used to "fingerprint" different sources of water (eg rainfall or groundwaters) and assess their relative importance in sustaining different wetland habitats. For example it is unclear to what extent the different lakes, dambos or areas of Mushito forest at Kasanka are fed by the annual rains or deeper flows of groundwater from their surrounding catchments. The pilot survey sampled 25 different waters in the National Park - including different wetlands, rivers and groundwaters. These were returned to the UK and analysed for alkalinity and major elements in Aberdeen and oxygen isotope ratios at the Scottish Universities Environment Research Centre at East Kilbride. Such measurements are often useful in distinguishing different geographical water sources – the alkalinity of rainfall is generally low, shallow groundwater alkalinity is generally moderate, whilst that of deeper groundwaters is often high because of longer residence times and opportunities for weathering reactions. Oxygen isotopes can indicate the residence times of water within different sources: comparisons of variations in isotope ratios in rainfall with those in wetlands, river and groundwater indicate the degree to which rain mixes with other water sources to sustain different wetland types. The pilot study indeed indicated that these hydrochemical tracing techniques have excellent potential for assessing the regional scale hydrology of the National Park and the mechanisms by which various wetlands are sustained, thus routine (ie fortnightly) surveys are planned during the first year of the fieldwork. Whilst any conclusions are tentative, it seems that some wetlands are mainly fed directly by rains, whilst other have a much stronger groundwater influence. Clearly these differences in hydrological processes have fundamental implications for management strategies to conserve the biodiversity associated with different wetland types. Further surveys were undertaken in September and October, though the analytical results are not yet available.

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.

KNP have now been recognised as a charity by the Zambian authorities, which was an essential prerequisite to importing the landrover free of duty. Despite the fact that the customs authorities have had all the relevant paperwork for some weeks, there have been further delays in the release of the landrover, which was causing great concern since it was hampering the progress of Dr.Kennedy's hydrological investigations. However, the latest news is that the landrover was released on 26 October and is currently being registered. In addition, the chairman of the Kasanka Trustees, Tagd Wixted , has obtained complete remission of storage charges (over 10 months) for the vehicle from the company concerned, which represents a donation of £3000.

An additional problem is the shortage of fuel throughout Zambia which at present appears to be due to ministerial incompetence rather than any more fundamental cause. However unless the situation improves (which we are assured is likely in the short term) it is bound to affect progress.

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

Changes to the project schedule/workplan: no/yes, in.....(month/yr)

3. 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 <u>planned</u> modifications to your project schedule/workplan or budget should <u>not</u> be discussed in this report but raised with the Darwin Secretariat directly.

Please send your **completed form by 31 October each year per email** to Stefanie Halfmann, Darwin Initiative M&E Programme, <u>stefanie.halfmann@ed.ac.uk</u>. The report should be between 1-2 pages maximum. <u>Please state your project reference number in the header of your email message.</u>