

Darwin Initiative for the Survival of Species

Half Year Report (due 31 October each year)

Project Ref. No.	14-029
Project Title	Monitoring and simulating threats to aquatic biodiversity in the Okavango Delta
Country(ies)	UK / Botswana
UK Organisation	UCL
Collaborator(s)	HOORC, University Botswana
Report date	31 st October 2006
Report No. (HYR 1/2/3/4)	1
Project website	http://www.geog.ucl.ac.uk/~mtodd/accord

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).

Progress during the last 6 months has gone exceptionally well, with respect to both training and research.

Planning Workshop (Apr 2006) A workshop was held at HOORC at which researchers, local government officials and stakeholders within the Delta were invited. We presented talks on aims of the project and the need to monitor and evaluate aquatic biodiversity (Mackay), biodiversity in the Okavango Delta (Murry-Hudson) modelling hydroperiod (Wolski), current work on bioassessment in the Delta (Mosopele) and on the Darwin programme in general (Mackay).

Training: At the start of this reporting period, 2 scientists from HOORC attended intensive advanced-level training courses held in the UK in Macrophytes (30th April - 6th May 2006) (Ms Belda Mosepele, the Darwin Research Fellow) and in Diatoms (5th - 9th June 2006) (Ms Philippa Mapila, associated research fellow on the project). At HOORC, training in macroinvertebrate analysis has been an on-going process now for c. 6 months, led by Belda Mosopele. All the staff below, plus two permanent field assistants at HOORC have been trained in sampling macroinvertebrates and their identification.

In the last report we did not give any details on the staff employed at HOORC on our project. Here we would like to rectify this. The Darwin Research Fellow is Ms. Belda Mosopele, who previously worked for Conservation International (which has since closed its offices in Botswana). She will also register for a PhD in South Africa / Botswana starting August 2007. We will use one of the MPhil monies to cover her PhD fees. We have also employed Mr Richard Mazebedi as the first technician on the programme. He will also register for a higher degree (MPhil) at the University of Botswana (Jan 07), and we will use Darwin monies to cover his fees. The other technical salary has been used to employ 4 new staff, who will work on the Darwin programme as laboratory technicians and field assistants. However, they are also receiving biological organism training, including at the moment macroinvertebrates and macrophytes; and in the future basic zooplankton and diatom analysis. The staff are: Mr Rebaeone Moshongo (33 yrs); Kelejangw Kutoro (31 yrs); Florah Joshua (25 yrs); Uanee Kauheva (24 yrs) and Laone Pitso (26 yrs). It is worth noting that many of these staff were previously employed on a short-term contract, investigating impacts of Government spraying programme for tsetse fly in the Delta. Darwin funds have ensured continuity of employment in this respect, thus preserving capacity for future development.

Anson Mackay and Tom Davidson (AM, TD) visited HOORC and the Delta for 3 weeks (29th Aug - 17th Sept). The first five days of this visit was spent training up to 11 staff and students on chemical and biological sampling techniques in the Delta (including water chemistry, sampling for diatoms, phytoplankton, zooplankton, macroinvertebrates). Staff trained included the personnel mentioned above,

but also 2 field assistants who have permanent contracts with HOORC at UB.

Research: The remaining 2 weeks in the Delta saw the start of our data collection from which to build up our knowledge of baseline data in terms of aquatic diversity, but also to determine functional relationships between aquatic organisms and their environment. Samples and data were collected for both biology and water chemistry at 5 main locations on the Delta (number of sites sampled in brackets): Shakawe in the Upper Panhandle (9), Guma Lagoon and neighbouring channels (12), the lower reaches of the Boro river (2), Santantibide (6) and Lake Ngami (2), both of which were flooded for the first time in many years. Both these latter sites will represent the extreme end of our hydroperiod gradient.

In terms of the Key Milestones that we said we would deliver, I can confirm that the following have all successfully been achieved: Start-up and Planning workshop was held at HOOC; UB research student has been identified and will start his MPhil in Jan 07; candidate locations identified; manuals and protocols have been produced and will shortly be available on the website; we held a field methods training course; sampling programme 1 was successful completed in September 2006. Taxonomic workshops will be held next year, once we have identified and counted some of the biological data, although macroinvertebrate training has been an ongoing process now for several months. I was also interviewed by the Chief Editor of the Botswanan *Wena Industry and Environment Magazine*, and we are currently putting together an article on the Darwin programme for publication in a future issue.

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.

(i) Since the project started earlier this year, one of our partners Conservation International have closed their offices in Botswana; (ii) we were due to hold a taxonomic workshop early this year. But as we have just started to collect field data on biological organisms, these workshops will now take place later in the project; (iii) we have made links with IUCN UK Office (Dr Darwall and I are currently exploring avenues for collaborative research and training opportunities).

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

I have already mentioned to Margaret Okot by email (11th Aug 06) that CI have closed their premises and made the request to give the small amount of monies originally ear marked for CI (£1000 per annum) to the main partners at HOORC, University of Botswana. This would be especially appropriate because Belda Mosopele was our contact at CI, but is now actually working on our Darwin project at HOORC. However, I have not yet heard anything from the secretariat, but would like to know soon that HOORC can indeed use this money instead?

Discussed with the DI Secretariat: no/yes, in..... (month/yr)

Changes to the project schedule/workplan: no 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?

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 or budget should not 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, stefanie.halfmann@ed.ac.uk . The report should be between 1-2 pages maximum. **Please state your project reference number in the header of your email message.**