

Darwin Initiative for the Survival of Species

Half Year Report (due 31 October each year)

Project Ref. No.	162/12/012
Project Title	Xaté palms (<i>Chamaedorea</i> spp.) in Belize: conservation and sustainable management
Country(ies)	Belize
UK Organisation	The Natural History Museum
Collaborator(s)	Belize Forestry Department; Belize Botanic Gardens
Report date	10 th November 2004
Report No. (HYR 1/2/3/4)	2
Project website	N/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).

The project has progressed well during the last six months.

A. The permanent defoliation plots at Las Cuevas (informing on the effects of leaf harvesting on xaté growth and reproduction) were re-measured in both April and September by Holly Porter Morgan and Las Cuevas staff. A preliminary report on the initial findings was prepared and submitted to the Belize Forestry Department (BEF) in August. In May, Nick Wicks re-measured his 50 permanent plots. A report on his preliminary findings on xaté growth rates was submitted to the BEF in October. In addition, the xaté inventory of the Chiquibul forest has continued with over 150 plots established to date. The samples now cover an area of approximately 30 km by 25 km. The Government of Belize requested an interim report on the xaté resource of the Chiquibul Forest Reserve to inform on concessions. One was submitted to them on the 1st September 2004. Preliminary survey data has been plotted using GIS, and maps prepared. These will inform on the final phase of surveying. A full and final analysis will be done after completion of the field surveys. A Belizean GIS intern from the Forestry Department has been identified (Ivis Chan). A preliminary date for her visit to the NHM has been set (March 2005). The intern will be assisting in the fieldwork programme between now and March 2005. A two day workshop on xaté survey methodology was held at Las Cuevas on the 30th and 31st August. This was attended by 16 people from the Forestry Department and two local NGOs – the Belize Service Community Alliance (Cayo) and the Ya'axché Conservation Trust (YCT, Toledo). These two NGOs will be assisting in the survey programme in the future.

B. At the Belize Botanic Garden the educational xaté demonstration plots (illustrating the potential for cultivation of xaté under a forest canopy) have been amplified. The nursery techniques have also been perfected. A local farmer (James Mesh) is now employed as the project's education/farmer extension officer. On July 8th Mr. Mesh attended a meeting between the Belize Agricultural Health Authority (BAHA), the Departments of Agriculture from Belize, Guatemala and Mexico, the Guatemalan and Belizean Forestry Department, the Asociación Alianza Para un Mundo Justo, the Organization of American States (OAS) and Tiger Run Farms. At this meeting the commercialization and trade of products/goods (including xaté) were discussed.

On the 29th July a workshop for farmers, communities and organizations with an interest in growing xaté, as well as organizations interested in the xaté industry in Belize, attended a day workshop at the Belize Botanic Gardens. A technician from ACICAFOC (Guatemala) with experience in cultivating xaté assisted to share his experiences with the attendees. The BBG xaté nursery and plantation demonstration plots formed the foundation of discussions.

Between August 9th and the 14th Mr. Mesh facilitated a xaté workshop for three communities in Cayo District (El Progreso (7-Miles), Cristo Rey and San Antonio) together with a Guatemalan xaté technician (Rudolpho López) from ACICAFOC. 80 participants from the three villages attended this event. The main objective of the workshop was to provide information on xaté cultivation to farmers with an interest in growing it. Mr. Rodolfo Lopez and James Mesh covered the following topics in relation to xaté, including seedbed preparation, seed harvest, seed cleaning, seed treatment, seed germination, seedbed care, seedling transplanting and plantation care.

C. In May, Philipa Pickles (Edinburgh University) visited Belize and Guatemala to collect data to form the basis of her MSc thesis on the potential for eco-labelling of Belizean xaté. One month was spent in the field. This work was submitted for an MSc in September. The thesis is currently being re-worked into a report for the Belizean government.

1.Cont.

D. Work in the lab has been progressing well since March. Work ended on the *Chamaedorea* phylogeny in June, and manuscripts and reports are nearing completion. Lab work on xaté AFLPs commenced in September. Preliminary results are promising. In October Meredith Thomas (NHM) visited the New Mexico State University (US) to learn the AFLP protocol from Dr. Donovan Bailey, who has extensive experience with this lab technique. Ms. Thomas has recently returned from her trip to NMSU and is in the process of standardizing laboratory equipment to be compatible with the new protocol. All the necessary samples and equipment required to conduct a large pilot study on xaté genetics are in place. Completion of the pilot study is anticipated for the end of the year, at which point the area of xaté genetic diversity worth further exploration and study will be finalised, with a view towards further collection and research.

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 main unexpected development encountered over the last six months relates to changes in staff at the NHM. This necessitated changes to the PI of the project, to the project financial administrator and to the molecular researcher/palm specialist. These issues have been fully discussed with the Darwin Secretariat. It is not anticipated that this will affect either the project expenditure or the schedule of outputs.

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

Discussed with the DI Secretariat: Yes, in Oct. 2004

Changes to the project schedule/workplan: No

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 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.**