

Darwin Initiative: Half Year Report

(due 31 October 2011)

Project Ref No	17-022
Project Title	Conservation of the lowland savanna ecosystem in Belize
Country(ies)	Belize
UK Organisation	University of Edinburgh (UE) with Royal Botanic Garden Edinburgh (RBGE)
Collaborator(s)	University of Belize (UB), Environmental Research Institute (ERI) Belize Botanic Garden (BBG); Government of Belize Forest Department (FD); Programme for Belize (Pfb), Belize Tropical Forest Services (BTFS).
Project Leader	Dr Neil Stuart
Report date	31 October 2011
Report No. (HYR 1/2/3/4)	HYR 3
Project website	http://eeo.ed.ac.uk/sea-belize

1. Outline of progress over the 6 months 1st April – 30th September 2011 against the agreed project timetable. Activity numbers (in brackets) refer to the project Logframe.

Project Co-ordination

4th -8th April 2011: Dr Neil Stuart (NS), Duncan Moss (DM) and Zoe Goodwin (ZAG) hold bilateral meetings with in-country project partners Pfb, BBG, ERI and BTFS to prepare for partner meeting (1.2).

8th April 2011: Annual Partner Meeting. All host country (FD, Pfb, BBG, ERI and BTFS) and UK project partners attend this meeting, hosted by the ERI in Belmopan (1.2)

13th April 2011: Savanna Science Meeting held at the Belize Tropical Education Center. Project staff and partners present the project's scientific results to a consultative meeting attended by representatives of Belizean NGOs and government departments with responsibilities for managing savanna. (3.4).

September 2011: Requests for and collation by NS of activity reports from each partner. (1.2).

September 2011: Forward planning and budgeting discussions by NS and DM with each project partner to review progress since April and to confirm activities to be completed by end of project. (1.2).

Repatriation, databasing and curation of specimens into the Belize Herbarium (BRH)

April-May 2011: ca. 880 plant specimens collected by this Darwin project are repatriated to the Belize herbarium (BRH). Duplicates are distributed to (in order of priority): British Museum (BM), Herbario Nacional de México (MEXU), Missouri Botanic Gardens (MO) and Kew Herbarium (K). (1.6).

26th June 2011: 'End of project' copy of savanna database handed over to Oxford for hosting on the Brahm's Online website <http://dps.plants.ox.ac.uk/bol/seabelize> (1.9).

26th June 2011: 'End of project' database handed over to ERI in Belize as an archive copy, together with a 'Top copy' to be maintained and updated with future accessions by the ERI (1.9).

July-September 2011: Project website enhanced to support geographical queries to plant database (1.7)

April-September 2011: 200 further savanna specimens mounted by GL and curated since April 2011.

April-September 2011; 52 days spent by GL re-curating the remaining mounted plant specimens (pre-dating this project) into 4 new cabinets in the Belize Herbarium - ca 2, 360 specimens in 74 families (from Meliaceae to Zygophyllaceae). Over the project period, ca 9,500 specimens have been re-curated in 97 days, with the task completed on 11th October 2011 (1.6). Collection records were used by GL to update the top copy of the Brahm's database which, since June 2011, is now maintained by ERI (1.7).

September 2011: GL begins additional task of incorporating mounted plant specimens from UB into the BRH Herbarium and assessing a backlog of ca 3,500 presently unmounted specimens stored in BRH to determine their suitability for preservation (1.6)

Reports, publications and other media and press outputs

April-May 2011: Botanical, soil survey and mapping results prepared and delivered to BTFS for collation into outcome report on the Savanna Science Meeting (ZAG, PAF, DM, NS) **(3.5)**.

May 2011: 5 Photo-Guides (total of 22 pages; 403 original photos) published by ZAG, GL and SB on project website <http://www.eeo.ed.ac.uk/sea-belize/education.html#photo> **(5.2)**.

June 2011: 7 Botanical factsheets published on <http://www.eeo.ed.ac.uk/sea-belize/education.html#facts> **(7.2)**.

15th June 2011: Publication of Hicks, Jeff, Goodwin, Zoë A., Bridgewater, Samuel G.M., Harris, David J. & Furley, Peter A. (2011) A Floristic Description of the San Pastor Savanna Belize, Central America. *Edinburgh Journal of Botany*. 68(2): 273–296 **(4.1)**.

22nd June 2011: Lowland savanna checklist submitted for publication in *Phytotaxa* by ZAG **(2.2)**.

July 2011: Project 17-022 is the cover story for the first edition of the re-launched Darwin Newsletter http://darwin.defra.gov.uk/newsletter/DARWIN_NEWS_18.pdf/

August 2011: Successful completion of 2 dissertations affiliated to the Darwin project and supervised by project staff for the Masters of Geographic Information Science at Edinburgh University:

Sato, G 'Enabling geographical queries to a botanical database'

Wilson, L 'Comparison of savanna land cover in Belize from 1980-2010 from LANDSAT'

(These projects have yielded supplementary data on historical extents of savanna in Belize and enhanced the functionality for querying the savanna plant database through the project website **(1.1, 1.9, 3.1 & 3.2)**.)

July – September 2011: Consolidated report written up on the field descriptions of ca 75 sites visited during the project and the specimens collected at each site by ZAG and GL. **(1.3)**.

September 2011: Final report describing the completion of the project's re-creation work at the Belmopan Herbarium written by GL and ZAG and submitted to FD. **(1.6)**.

23rd September 2011: Key findings from the previous 12 months of the project are presented by ZAG and NS to the 14th Annual UK-Belize Association Conference, University College London, UK. **(1.3, 3.1)**

23rd September 2011: Project staff receive formal thanks from the Belizean High Commissioner at a UK Press briefing held at the Hyatt Regency, London to mark 30 years of Belize's independence.

29th & 30th September 2011: Seminars describing project results presented to RBG Edinburgh (ZAG).

September 2011: 158 Photoguides printed for hand delivery to organisations in Belize in January 2012.

Staff Development and Training

3rd-10th April 2011: Darwin Botanist German Lopez (GL) receives training in soil survey methods by Prof Peter Furley (PAF). Profile descriptions made and samples taken at 16 savanna sites in Central / Southern Belize. Samples exported and are presently being analysed at UE. **(1.8)**.

11-17th April 2011: GL attends a one week training workshop in forest inventory, conducted by Percival Cho of the FD, as part of a forest carbon stock assessment project being carried out for the Ya'axche Conservation Trust (YCT) within the Golden Stream Corridor Preserve (GSCP). **(1.8)**.

18 -19th April 2011: GL receives training from Dimitri Michelakis (UE) in establishing 1ha temporary plots for forest mensuration in pine savannas. Follow-up fieldwork planned for February 2012 to collect further data that will allow a more rigorous validation of the savanna mapping **(3.1)**.

August – September 2011: GL prepares materials for a course in the mounting of plants, to be given to University of Belize students in collaboration with FD **(1.8)**.

September 2011: Project announces 2 scholarships for young Belizean scientists to participate in the fieldcourse in *Plant Taxonomy and Biodiversity* to be held in January 2012 at PFB's Hillbank station. GL and ZAG accept invitations to co-lead the teaching of the savanna course elements. **(1.8)**.

Educational Resources developed at Belize Botanic Gardens (BBG)

April 2011: 1,000 copies of 'Save the Savanna' board game and 'Savanna Coloring Book' are designed and printed for distribution to local schoolchildren **(7.1, 7.2)**

May 2011: Local TV, radio and poster advertising campaigns announce the opening of the Savanna Trail at BBG **(6.2)**

June 2011: Filming begins for the 'Savanna Sam' educational video **(7.1)**

August 2011: First Schoolbus Tour brings 40 local primary school children to the Savanna Trail **(6.3)**

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.

There are no problems to report in this period that will affect the budget or timing of activities.

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

The proposed transfer of funds from the UK consultancy budget line has been discussed with Eilidh Young of LTS. We understand no change is required to the original agreement.

Discussed with LTS: **no**

Formal change request submitted: **no**

Received confirmation of change acceptance **no**

3. Do you expect to have any significant (eg more than £5,000) underspend in your budget for this year? Yes No

Estimated carry forward request: £ nil

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 or budget should not be discussed in this report but raised with LTS International directly.

Please send your **completed form by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 1-2 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 17-075 Darwin Half Year Report**