

Darwin Initiative: Half Year Report

(due 31 October 2009)

Project Ref. No.	Darwin Ref. 16-001; R15176 (UEA);
Project Title	<i>Community-based sustainable management of forest resources in Amazonian extractive reserves</i>
Country	Brazil
UK Organisation	University of East Anglia (UEA)
Collaborator(s)	1) Secretaria do Estado do Meio Ambiente e Desenvolvimento Sustentável (SDS), Environmental Secretariat, State of Amazonas, Brazil; (2) Brazilian Institute of the Environment and Natural Renewable Resources (IBAMA), Brazil
Project Leader	Prof Carlos A. Peres
Report date	31 October 2009; extension to 13 November 2009
Report No. (HYR 1/2/3/4)	HYR 3
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).

During this period (23rd May – 13th November 2009), the project has made good progress towards achieving its goals. To summarise the main activities:

1. The **third meeting & training course** of the project was held at the Bauana Field Station, Amazonas, Brazil, within the Uacari Sustainable Development Reserve on the 14-16th September 2009. A total of 48 of the project's monitors attended, together with representatives of our collaborators SDS (ProBUC), IBAMA, CNS, and the local Cooperative of Forest Extractivists (AMARU). The occasion was used to deliver ongoing training, to reinforce the project aims, and to present preliminary results through a series of seminars delivered by project members. All of this information was received in a very interactive and convivial environment, and the workshop was well regarded.
2. A four-week **visit by the project leader**, Prof. Carlos Peres, incorporated time spent in the reserves, Carauari and Manaus. He led the project meeting and training course, visited various aspects of the project, met with key collaborators and negotiated data-sharing opportunities.
3. During this period we also successfully initiated a series of understorey mist-net sampling campaign across the two reserves to complement existing data on the avifauna at both várzea and terra firme forests, as part of our **biodiversity monitoring** programme.
4. **Fauna and fruit line-transect censuses** continue to be conducted on 90 forest transects on a monthly basis, involving 31 monitors.
5. **Household interviews** continue to be conducted on a weekly basis by 31 monitors. These data are being entered by a project employee at our Carauari office, to whom the team deliver ongoing training and support.
6. **Household and community-level interviews** were conducted by the team, collecting data on the demographics, socio-economics, material assets and principal activities of

115 houses and 18 communities throughout the two reserves. These one-off interviews were paired to the weekly interviews being conducted by our local *monitores*.

7. Eight hunters are now regularly **mapping their exploited (forest catchment) areas** using a handheld GPS.
8. The **monitoring of the *Copaifera* oleo-resin harvest** has begun. All *Copaifera* trees drilled for their oleo-resin by monitors working in six communities are being mapped and measured. This will give an indication of the reserve-scale potential of this resource.
9. **Key NTFP resources were mapped in the várzea** forest habitat during this period, complementing the work conducted in the terra firme in 2008. Adult *Copaifera* spp., *Carapa guianensis* and arborescent palms of several species were mapped along 26 of the 4-5km transects in this habitat, and sample plots of *Copaifera* saplings and seedlings were censused.
10. Monthly **phenology censuses** are being conducted on 8 transects, in both *terra firme* and *varzea* forest.
11. Two hundred **fruit, leaf & seed traps** placed evenly within two 100-ha forest plots are being collected and dry-weighed on a bi-weekly basis.
12. Monthly **fruit-frugivore interaction observations** are being observed within one *várzea* forest and two *terra firme* forest 100-ha plots.
13. A 2-month intensive study of Scarabeinae **dung beetle community composition** was implemented across 33 transects, in *terra firme* and *varzea* forests, as well 18 inhabited areas (within community boundaries).
14. Two **additional dung beetle sampling projects** were planned; a seasonal replicate across all sites (to occur January-March 2010) and longitudinal (five months) sampling in 96 points across the two 100-ha *terra firme* plots.
15. A comparison of the **rate of decomposition in terra firme and varzea forest** was commenced using a novel methodology. The rate of change is being recorded of a) two hundred large bones (bovine femurs sourced in Carauari), and b) 500 leaf-litter bags containing leaves of a single tree species, which were equally spaced along six *terra firme* and *varzea* transects.

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.

Our main diesel-powered project boat, used as a research vessel for both transport and logistical support (supplying food, fuel and materials to the field-team and our many field assistants and *monitores*) sank in an accident, whilst moored in Carauari port in late June. Little equipment was lost or damaged, but the costs of recovery, engine and hull repair and temporary hire of alternative transport were substantial. These costs had not been budgeted for in our original proposal, as explained in our Change-Request justification submitted in August 2009.

The continued devaluation of the pound (GBP) against the Brazilian real (R\$) has continued to present financial challenges to the project budget. The exchange rate is currently 2.84, having fallen from 3.75 in October 2007 when the project began. This represents a 24% loss of the financial resources available to the field project in direct expenditure. Furthermore, given the predicted growth of the Brazilian economy, we expect this exchange rate to continue to fall during the lifetime of this project.

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

Discussed with LTS: **yes**, in February-August 2009

Formal change request submitted: **yes**, in August 2009.

Received confirmation of change acceptance **yes on 26 August 2009**; ref LTS035
(email from Eilidh Young)

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 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: 14-075 Darwin Half Year Report**