

Darwin Initiative: Half Year Report

(due 31 October 2010)

| | |
|---------------------------------|---|
| Project Ref No | 17-023 |
| Project Title | Linking research and environmental education to reduce Amazonian wildfires |
| Country(ies) | Brazil |
| UK Organisation | Lancaster Environment Centre, Lancaster University |
| Collaborator(s) | Museu Paraense Emílio Goeldi, Belém, Brazil and others |
| Project Leader | Dr. Jos Barlow (PI), Dr. Luke Parry (coordinating) |
| Report date | 04 November 2010 |
| Report No. (HYR 1/2/3/4) | 1 – (reporting period: May to October 2010) first 6 month report |
| Project website | http://www.tropicalforestresearch.org/projects/humansandwildfires.aspx |

We have achieved our objectives for this reporting period and have suffered no significant hold-ups. Principally we have **a)** Initiated and almost completed data collected in our first study region, Santarém. This has involved: training (interview techniques, agricultural production calculations, using GPS and computer software) a team of 08 interviewers, all of whom are from the Amazon region; **b)** Conducted interviews with approximately 200 rural producers in the Santarém region, spread over an area of approximately 150 * 150 km. The interviewed properties have been chosen based on a random selection process following complete property mapping of our 16 micro-study areas (hydrographical stream basins of ~ 5000 Ha). Data collection in Santarém will be completed by December 20th 2010. Our aim is 400 interviews from Santarém; **c)** Arranged field sites and interview teams for our second study region, also in Pará state, the municipality of Paragominas. Data collection will begin on 10th January 2011 and is anticipated to be completed by 30th April 2011. Our aim is 400 producer interviews from Paragominas; **d)** Developed a database and made significant progress with analytical plans, based principally on a strong and ever-strengthening collaboration with Prof. Danilo Iglori and colleagues (2 PhD students and 3 undergraduate research assistants) at the University of Sao Paulo. **e)** Additional research on fire-management and fire costs by our PhD student, Rachel Carmenta, has gone extremely well. She has completed 150 questionnaire surveys in the Rio Arapiuns region of Santarém and has also initiated ethnographic data collection and participatory mapping. She is on course to finish her data collection by 20th December 2010; **f)** We have used this Darwin Initiative project as one of the cornerstones of a major grant proposal to establish a Brazil-UK research network involving 35 institutions. The proposal was submitted to the SISBIOTA call from Brazil's National Research Council (CNPq) in late October 2010; **g)** Our two Brazilian Masters students have started the data collection for their research projects. Specifically, Carla Furtado is collecting data linking forest flammability to human-caused forest disturbance – particularly previous forest fires and logging. Her findings will be very important in interpreting the environmental consequences of land-management based on our questionnaire data. Amanda Estefania is studying the role of silvicultural expansion in reducing “slash-and-burn” agriculture by Amazonian smallholders. Smallholder-based silviculture has started to expand over the last 2-3 years in Amazonia and to our knowledge there is no scientific understanding regarding the consequences of this land-use change for fire-use and the risk of associated wildfires.

QUERY: We were delighted to receive recognition for the progress made in fostering collaboration with Brazil's premier agricultural research institute, Embrapa. However, we would like to clarify that we see this collaboration as complementary to the existing lead-partnership with the Goeldi Museu, not as a replacement. We cite the following reasons: **1)** The Goeldi Museum is a highly respected institution in the Amazon and our collaborators there (particularly the recent director, Dr. Ima Vieira) were highly supportive and motivated in developing the work to-date. **2)** The Goeldi Museum has been absolutely critical in assisting our Darwin Project with

additional governmental funding in Brazil to cover the considerable costs of deploying up to 3 field teams in remote rural areas. **3)** The Goeldi Museum already works in very close cooperation with Embrapa. For example, the two MSc students we fund are doing their Masters degrees on a joint Museu Goeldi/Embrapa/Federal University of Pará, course.

Not surprising, conducting fieldwork in the Amazon region can be challenging due to rainfall, transport difficulties, etc. However, thus far we have managed to keep data collection and project activities going in the face of these challenges. Experience in the region and strong and supportive collaborators have been essential to this success. Training local young scientists to undertake our questionnaire research has been both challenging and immensely rewarding. Education, including higher education, is notably poor in the Amazon region, and our team has required a large amount of training and support in terms of organization and interviewing. However, they have made excellent progress and we strongly believe we have turned 8 graduates into 8 young scientists!

The logistical difficulties and the time and financial investment in training the team (e.g. conducting many pilot interviews etc) has strained both the budget and the timetable. However, we believe we will finish questionnaire interviews in both Santarém and Paragominas on-time because we have recently contracted and trained a further 3 interviewers. In financial terms we are able to continue as planned due to additional contributions from our project partners at the Goeldi Museum (specifically, a CNPq grant that is providing matched funding for the fieldwork)

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

No – there are no major changes.

Discussed with LTS: **no/yes, in..... (month/yr)**

Formal change request submitted: **no/yes, in.....(month/yr)**

Received confirmation of change acceptance **no/yes in.....(month/yr)**

3. Do you expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes No

If yes, and you wish to request a carryforward of funds, this should be done as soon as possible. It would help Defra manage Darwin funds more efficiently if you could give an indication of how much you expect this request might be for.

Estimated carryforward request: £

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**