



Darwin Initiative: Half Year Report

(due 31 October 2014)

Project Ref No	19-008
Project Title	Building biodiversity research capacity to protect PNG rainforest from logging
Country(ies)	Papua New Guinea (PNG)
Lead Organisation	University of Sussex
Collaborator(s)	Binatang Research Center, Madang, Papua New Guinea
Project Leader	Dr Alan J A Stewart
Report date and number (eg HYR3)	28 th October 2014 (HYR3)
Project website	

1. Outline progress over the last 6 months (April – Sept) 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 to end September).

This account reports against the project implementation timetable (Table 18 in application form):

1.1-1.3: Wanang Conservation Area (WCA) management and infrastructure

- Binatang Research Center (BRC) continues to pursue the declaration of the WCA as a protected area with PNG Department of Environment and Conservation (DEC) and other stakeholders. There have been some promising developments which we expect to bring to fruition by the end of the current project. The reviewer of our last annual report (April 2014) raised the question of whether there is a contingency plan if the conservation area has not been granted legal status by the end of the project. Should this happen, DI-trained BRC staff will continue to engage in the administrative process of pressing for legal status. Also, our companion project funded by the Waterloo Foundation, which has the objective of developing sustainable income streams for the WCA, will continue for a full year after the end of the current DI project.

2.1-2.2: Training of WCA field assistants

- After training at BRC and Wanang, we have formed the following teams of fully-trained local experts on focal taxa that can serve as assistants to visiting projects: L. Paul and M. Mulau (birds); F. Kimbeng and L. Ruma (butterflies); J. Filip, D. Rinan, M. Saen and B. Siki (plants).
- L. Paul and J. Filip were trained in operating the canopy bubble (helium balloon for research canopy access) by Ocean Vert.

3.1: Training of Binatang Research Center (BRC) para-ecologists at BRC

- Training continues at BRC of 18 para-ecologists, including visits, seminars and training sessions by the following overseas researchers:
 - Alan Stewart (1 week), Vojtech Novotny (3 months)
 - Jan Frouz, Charles University, Prague: soil biology, (2 weeks)
 - Yves Basset, Smithsonian Tropical Research Institute (3 weeks)
 - Samuel Urlacher, PhD student, Harvard University (3 weeks)
 - Dirk Karger, Zurich University (3 weeks)
 - Maurice Leponce, Royal Natural History Museum, Belgium (3 weeks)
 - Conor Redmond, PhD student, University of South Bohemia (2 months)
- Roll Lilip visited Tokyo University and Chiba University in Japan for 3 months training (June-August), took part in insect herbivore sampling, using the canopy crane at Tomakomai Research Station, and worked on Lepidoptera rearing and identification.

3.2: Training of BRC para-ecologists in UK

- Maling Rimandai and Frank Philip (both BRC para-ecologists) visited UK, Australia, Singapore & Czech Republic for intensive training, including:
 - Visit to the Biology Centre, Academy of Sciences of the Czech Republic: seminar presentation given, molecular laboratory training for 2 days, plus visits to protected areas and field study sites.
 - 1 week at Sussex University (training in forest carbon storage assessment for REDD by Dr Mika Peck, plus visits to protected areas and field study sites)
 - 1 week training at Royal Botanic Gardens, Kew, Herbarium
 - Basic Canopy Access course at Stourhead, Wiltshire (1 week)
 - 1 week training in Entomology Department at Cardiff Museum
 - One-day visit to Rothamsted Research
 - Visit to and seminar given at the National University of Singapore
 - Visit to research collaborators at Griffith University (Brisbane) (hosted by Prof Nigel Stork) and giving a seminar there.

4.1: Honours & MSc student research

- Darwin Initiative MSc students (Nigel Baro, Jimmy Moses, Clant Alok and Clementine Sesega) continued to receive training in their research. All four are on target to finish and write up their research by the end of the current DI project.
- Clant Alok was appointed Business Development Officer (BDO) for our Waterloo Foundation project and has been working part-time on this since May 2014 whilst writing up his Masters research.
- The regular weekly programme of seminars for students and researchers at BRC continues, with presentations from members of BRC about their work, talks from visiting scientists and discussion of research papers.

5.1-5.3: Biodiversity surveys

- The large-scale Mt Wilhelm altitudinal survey, based at 6 elevations, of ecological interactions between *Ficus* trees and their herbivorous insects continued.
- Long-term surveys of seed-feeding insects and butterfly communities continue in the WCA
- A survey of bird communities in relation to habitat variables by a University of Sussex M.Phil. student (Richard Hazel) has been initiated in the WCA.
- A survey of forest carbon stocks in the WCA, following training by Dr Mika Peck, University of Sussex, has been initiated.
- Continued survey of vertical stratification of rainforest insects using a hot-air balloon to access the canopy in the WCA.

6.1: Fund raising for WCA

The recently appointed Business Development Officer (Clant Alok) on our Waterloo Foundation project has been working on the Business Development Strategy, liaising with the local community leaders and researching potential markets for services that the WCA could provide.

Other developments:

A number of further developments will be reported in full detail in our next Annual Report. Briefly however, they include:

- 3 research papers in peer-reviewed international journals, including a multi-author collaboration on "a worldwide network monitoring forests in an era of global change" published in *Global Change Biology*.
- Symposium entitled *From the mountains to seas: altitudinal trends in New Guinea biodiversity* organised at the Association for Tropical Biology & Conservation (ATBC) conference in Cairns in July 2014. 5 presentations given based on DI-funded research.
- A formal resolution on PNG biodiversity conservation and capacity building was proposed by BRC staff and accepted by the Conservation Committee of the ATBC. The declaration can be viewed at <http://tropicalbiology.org/resolutions/>
- Various media coverage (TV, radio, newspapers) of the above ATBC resolution.
- BRC has developed a partnership with the newly formed Papua New Guinea Research, Science & Technology Council, a government agency tasked with developing strategy for research in the country. Prof. V. Novotny has been invited as one of the advisors for the Council, thus providing an opportunity to have direct input to the national research policy.

2a. 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.

No significant problems have been encountered.

2b. 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/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No

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

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully as it is unlikely that any requests to carry forward funds will be approved this year. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project and would like to talk to someone about the options available this year, please indicate below when you think you might be in a position to do this and what the reasons might be:

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 can be discussed in this report but **should also** be raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 20-035 Darwin Half Year Report**