

**Darwin Initiative for the Survival of Species
Half Year Report (due 31 October each year)**

Project Ref. No.	14-047
Project Title	Tropical Andean Butterfly Diversity Project– TABDP
Country(ies)	USA, Venezuela, Colombia, Ecuador, Perú, Bolivia
UK Organisation	University College London
Collaborator(s)	Venezuela: Museo del Instituto de Zoología Agrícola, Universidad Central de Venezuela, Maracay (MIZA); Instituto de Investigaciones Científicas de Venezuela IVIC. Colombia: Instituto de Ciencias Naturales, Universidad Nacional de Colombia (ICN); Universidad de los Andes, Bogotá. Ecuador: Museo Ecuatoriano de Ciencias Naturales, Quito (MECN). Perú: Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima (MUSM). Bolivia: Museo de Historia Natural Noel Kempff Mercado, Santa Cruz (MHNNKM); Museo Alcides D'Orbigny Cochabamba (MAO) y Colección Boliviana de Fauna de La Paz (CBF). USA: Florida Museum of Natural History, University of Florida, Gainesville (FLMNH). Andes Region: Conservation International (CI).
Report date	October 31, 2007
Report No. (HYR 1/2/3/4)	HYR 3
Project website	www.mariposasantinas.org (Spanish), www.andeanbutterflies.org

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).

Student training

Following discussion with country coordinators, we have offered three different types of training course this year based on the perceived need in each country. The Basic course is the same as that of 2006, in countries where there are many new students who did not attend the 2006 course. The Intermediate course includes an introductory day for new students, containing much of the background material from the Basic course, with additional more specialised lectures and practicals for returning students from 2006. In addition, there is a greater emphasis on field techniques. The Advanced course is only available for those with prior experience of butterfly research and is designed to support and encourage students from the previous year. It includes lectures by instructors on their own areas of expertise, discussing in more depth research project design, and has an even stronger field component, with demonstration of advanced techniques such as tree-climbing, introduction to host plant identification and collection, and teaching of identification of certain important Andean groups.

To date we have received approx. 90 applications for all courses. The Ecuador course (Advanced) has been conducted at the Reserva Ecológica Arcoiris, Podocarpus National Park, Zamora-Chinchipec, from 17-21 September. A total of 8 students and 3 members of the host conservation foundation Fundación Arcoiris attended.

The remaining courses for this year are as follows: VENEZUELA: Course will probably not run due to lack of applicants. PERU: 20-25 November, Tarapoto, San Martín, Intermediate. 17 students already selected. Tarapoto resident and student from the 2006 course Raul Gonzales, who is also the director of the butterfly-oriented NGO, URKU, in Tarapoto, is coordinating organisation with Blanca Huertas. BOLIVIA: 30 November-5 December, Estación Biológica Asociación comunitaria de Ecoturismo Urpuma, Parque Nacional y Área Natural de Cotapata, La Paz. Intermediate. 19 students selected. COLOMBIA: 14-19 December, Estación Biológica Yotoco, Cauca. Intermediate. 41 applications received, selection in progress.

Nearly 40 applications from 6 countries were received for small student project grants from TABDP. We are currently providing financial and logistical support to c. 20 research projects on Andean butterflies, selected following a competition in the five Andean countries in March 2007. We hope these projects will contribute to research on butterflies in each country and stimulate young researchers to continue studying butterflies. Approximately USD \$12,000 was distributed in 2007, mainly to support fieldwork in these projects. Projects were selected based on their relevance to understanding diversity in tropical Andean butterflies and their conservation, on their overall scientific merit, on their feasibility, and on the importance of the research to the project members' own studies of butterflies.

Databasing and curation

The Darwin database is now fully operational. Databasing has continued at FLMNH (Florida) and the NHM (London), with an additional c. 8,000 records added to the project database. Databasing has also continued in Andean countries, with an additional 14,138 records. Databasing is being conducted by project members and assistants funded by the Darwin Initiative and Conservation International and by other project members and volunteers, and names of contributors will shortly be made available on the project website database page. Project members have been involved in curation of the collections of the BMNH (London), FLMNH (Florida) and MECN (Quito).

Our pioneering work on this database has been useful not only for South American work, but also is providing a model for other projects. Dr. Silvia Mercenero of the Southern African Butterfly Conservation Assessment (SABCA) project has put in a proposal to GBIF to perform a similar specimen databasing job at the NHM for their South African Butterfly Atlas Project. On Andean butterflies such as Stephane Attal, who has donated his entire *Callicore* type image collection, which will be made available on the project website.

Project website and mailing list

The project database is now freely available online at www.mariposasandinas.org/database.html. We request the country of origin and student status of each potential user to monitor use of the website, after which users are instantly sent a password to access the site. The database can be searched via 4 different search pages that permit users to search for specimens in the database, to search for taxonomic information about a particular species-level taxon name, to generate a summary of information for any species, including geographic and elevational range, and images of each subspecies, and to generate any part (or all) of the current neotropical butterfly checklist.

The distribution database includes 56,867 specimens and 38,192 records, from numerous collections. The majority of the specimens are in the BMNH (London) (32,839 specimens) and FLMNH (Gainesville, Florida) (7,359 specimens), thus contributing significantly to a major goal to repatriate specimen information. Other databases received from country coordinators (as detailed in the previous annual report), and from other sources, are being checked for consistency and will be made available online as soon as possible.

The taxonomic database contains 25,982 species-level names with taxonomic information as detailed in the annual report.

The Andes region coordinator, Gerardo Lamas, has made a major contribution by making available a free digital copy of the neotropical butterfly bibliography via our website: Lamas, G. 2004. [*Bibliography of Butterflies. An Annotated Bibliography of the Neotropical Butterflies and Skippers \(Lepidoptera: Papilionoidea and Hesperioidea\). Revised Electronic Edition.*](#) [complete to end December 2004]. Together with the database, the project website now provides more taxonomic, bibliographic and distributional data for neotropical butterflies than any other hard copy or online source.

The TABD mailing list (<http://www.mailinglists.ucl.ac.uk/mailman/listinfo/tabd>) has 140 members, and averages around 20 messages/month, including announcements, job opportunities, and queries to the list. We receive c. 100 enquires per month on information about the project, identifications, donations of images etc.

Dissemination

May 2007. Various members of the TABDP attended the second International Conference on Neotropical Butterflies ELEN in the city of Panama. A poster was presented of the project to report achievements made since 2006. A number of potential new collaborators were contacted.

July 2007. 5th International Conference on the Biology of Butterflies. Members of the TABDP participated in this conference in Rome, Italy. A poster detailing the project and showing progress to date was presented there.

The poster is now permanently displayed in the Natural History Museum, Department of Entomology, to provide visitors to the world's largest butterfly collection with information on the project.

Conference and workshop

Planning is underway for the 3-day Conference on Tropical Andean Butterflies, which will be held in Peru in August-September 2008. A number of researchers have already agreed to organise symposia on major topics. There will also be a 3 day workshop prior to the conference for project coordinators to meet and discuss the results of the project, to analyse data and to plan and develop the project's main publication, "Regional Strategy for Butterfly Research and Conservation in the Tropical Andes".

Conservation priorities for Andean butterflies

The TABDP is a major collaborator in the IUCN Red List Sampled Approach, the first attempt to assess the global IUCN conservation status of ten invertebrate groups, of which butterflies are one such group. The IUCN have selected 1,500 butterfly species at random to be assessed by the end of 2008 using standard IUCN criteria. Reassessments every ten years will permit long-term trends in conservation status to be identified and addressed. Because of the scarcity of population data for invertebrates, most species will be assessed based on geographic range data. The TABDP is thus in a unique position to contribute, and is responsible for assessing all tropical Andean species (c. 400 species). Two project members, Blanca Huertas and Keith Willmott, attended a 1-day conservation status assessment training course by the IUCN in London in July, and will be responsible for coordinating assessments with taxonomic and regional experts throughout the Andean region. The assessed species will be used as indicators of conservation and research priorities throughout the Andean region for the project's main publication.

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 Training and Database Coordinator, Blanca Huertas obtained a permanent position from August 2007 as Curator of the Lepidoptera Collection at the Natural History Museum, London. While this has resulted in some additional work for other project members, Ms Huertas remains fully involved and committed to the project and continues to assist with tasks for which she was formerly responsible. We also regard the appointment of a specialist in Andean butterflies to this competitive position as a highly significant event in terms of future research on this region's butterflies. However the NHM, recognizing the benefit of the TABD project to the Museum's goals and remit, are allowing Ms. Huertas to continue some of her duties; for example, she will be managing the field course logistics in Bolivia and Peru in November/December. With Natural History Museum permission, she will also attend the Bolivia course. Some of Huertas' databasing responsibilities must now be taken over by other personnel, including Fraser Simpson (technician at UCL), and possible additional helpers who will be hired on temporary contract basis.

Have any of these issues been discussed with the Darwin Secretariat and if so, have

changes been made to the original agreement?	
No, but this report should represent such communication.	
Discussed with the DI Secretariat:	no
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?

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.**