

Darwin Initiative Annual Report

Important note:

To be completed with reference to the Reporting Guidance Notes for Project Leaders – it is expected that this report will be about 10 pages in length – Submission deadline 30 April 2007

Darwin Project Information

Project Ref Number	EIDPO 17
Project Title	Conservation management zoning implementation and facilitation in Perlas Archipelago, Panama
Country(ies)	Panama
UK Contract Holder Institution	Heriot-Watt University, Edinburgh
UK Partner Institution(s)	n/a
Host country Partner Institution(s)	Smithsonian Tropical Research Institute, Panama
Darwin Grant Value	£93,944
Start/End dates of Project	1 May 2006 / 31 March 2008
Reporting period (1 Apr 2006 to 31 Mar 2007) and annual report number (1)	1 Apr 2006 to 31 Mar 2007 - Annual Report number 1
Project Leader Name	Dr James Mair
Project website	http://striweb.si.edu/darwin_initiative/
Author(s), date	Dr James Mair & Dr Hector Guzman, 18 May 2007

1. Project Background

Las Perlas is the Archipelago in the Gulf of Panama (Tropical Eastern Pacific):



The main purpose of the proposed work in this Post-project application was to ensure that the newly approved conservation management zoning structure (“Las Perlas Special Management Zone”) is implemented properly and in a sustainable manner through continued guidance by the Darwin project team - advice based on sound scientific study and understanding of Las Perlas marine environment. The objectives of the original Darwin project (“*The main purpose is to build up research and habitat information about the marine and coastal environment of Las Perlas Archipelago, located in the Gulf of Panama, to properly enable it, or an appropriate area of it, to be designated by Panamanian authorities as a National Park*”) have successfully been met within the lifetime of the project (April 2003-March 2006). It is therefore timely and logical for work to continue, without loss of momentum (i.e. Post-project proposed to start in May 2006), especially since the authorities in Panama (AMP) rely on Dr Guzman and DI project results/advice for specific zoning implementation.

2. Project Partnerships

The well-established relationships between Heriot-Watt University and The Smithsonian Tropical Research Institute (STRI), and the Project Leaders, Drs Mair and Guzman have been further strengthened during this Year 1 of the Post-Project. The original project had established a Network of links with other current and previous Darwin project team members and this networking is being continued and developed. Dr Guzman at STRI has already all the appropriate contacts with the Panamanian government departments and the CBD focal point.

3. Project progress

The main outputs and activities during Year 1 have followed the expected milestones outlined in the project’s Logical Framework (see Annex 1 and 2).

3.1 Progress in carrying out project activities

All progress anticipated in the original Project Implementation Timetable for Year 1 has been achieved and in the time planned.

3.2 Progress towards Project Outputs

The intended main project outputs (2,4,5,8,9,11,12,13,14,17,20,23, - and the additional outputs 15,16,18,19) are all on their way to be being accomplished – if not already, and partly in Year 1, then in full by the end of Year 2. The position of Darwin Fellow A was filled by two interns on a rotating basis as indicated in the project proposal. These biologists were:

Ms Ivania Ceron – a Colombian National, registered with the University of Puerto Rico and working with Dr Hector Guzman for 9 months on the Darwin project. Her work was investigating mangrove ecology in the region and the connectivity of the Las Perlas mangrove stands with those on the mainland. Her results will shortly be written up as a PhD thesis and acknowledgement will be made to the support provided by Dr Hector Guzman and the Darwin project. Other additional data produced by her work has been sent to Heriot-Watt University for a MSc student (supervised by Dr Mair) to produce a journal manuscript (and MSc dissertation) on the DNA and genetics of mangrove populations in the area (related to the biological connectivity issue).

Ms Catalina Pimiento – a Colombian marine biologist, assisting Dr Hector Guzman on tagging and tracking of whale-sharks in the Las Perlas area and Gulf of Panama (3 months as Fellow with Darwin project).

Additional funding has been gratefully received from the British Embassy in Panama (see Project website) and this includes a small grant to carry out DNA analysis of populations of Snapper (an important fishery around Las Perlas). The other small grant is to go towards the study, including tagging, of marine turtles which is part of a larger additional study being carried out by Dr Guzman. The tagged turtles have been named Darwin 1 and Darwin 2 and their real-time movements in the Las Perlas region can be followed through links on the project website.

3.3 Standard Output Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
Established codes						
2	Training (ongoing)	2				
4	Training (ongoing)	5				
5	Training (ongoing)	2				
8	Project Leader visit	6				
9	Management Plan (ongoing and on schedule)	1				
11	Publications (accepted,submitted and in prep)	4				
12	Database (ongoing)	1				
13	Reference Collection	1				
14	Workshops	10				
17	Network (ongoing)	1				
20	Imagery	2				
22	Plots (mainly year 2)	0				

23	Capital transferred (on schedule)					
15,16, 18,19	Mainly Newspaper, but also BBC website (see text for detail)	3				
New - Project specific measures						

Table 2 Publications *

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	(if applicable)
Journal	Medina et al	J Shellfish Research	http://striweb.si.edu/darwin_initiative/	
Journal	Benfield et al	IJRS	http://striweb.si.edu/darwin_initiative/	

** See Darwin project website for full details of publication out outs and sources:*

http://striweb.si.edu/darwin_initiative/

3.4 Progress towards the project purpose and outcomes

Project Purpose and the outputs/outcomes are on target and the indicators, verification and assumptions are holding true (see Annex 1 and Panama Darwin Project website).

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

This post-project Darwin work is enhancing, as anticipated, the impact already established in the original Darwin project (2003-2006).

4. Monitoring, evaluation and lessons

Monitoring and evaluation is now well established from the 4 years of joint work on this overall project (3 years of Main project and now 1 year of post project activities. There are no major new lessons been learned during Year 1 of post-project but, obviously, experience is being gained all the time as the project develops.

5. Actions taken in response to previous reviews (if applicable)

N/A

6. Other comments on progress not covered elsewhere

No particular difficulties or risks have been encountered in Year 1 of this project and no major re-design of activities has been deemed necessary.

7. Sustainability

The profile of the project is high in the country (please see this Darwin project's website with news items from local press, etc. on developments in Las Perlas). This is the only Darwin project active in Panama currently and, since the main collaborator, Dr Hector Guzman, is well known in Government and media circles in this small country, nearly always when referring to the general work ongoing in Las Perlas Archipelago, the work is referred to as 'The Darwin project'. With the designation of both the marine Special Management Zone and the Hydrological Reserve on El Rey (an additional Darwin project output from the original project and from work done on El Rey by one of the original Darwin Fellows, Jose Miguel Guevara), further implementation of management plans and associated activities are starting to attract other sources of funding (see project website). The current exit strategy for this Post-project is still the same as anticipated in the proposal.

8. Dissemination

All dissemination activities (workshops held, publicity for local inhabitants/stakeholders, press releases, etc.) are described in the Project's website.

9. Project Expenditure

Table 3 Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

Item	Budget (please indicate which document you refer to if other than your project schedule)	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries (specify)			
TOTAL			

10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#)

A short news item for the Darwin Newsletter is being prepared to submit for June 2007. This will give the full details of the successful implementation into Panamanian Law of the Las Perlas marine Special Management Zone.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2006/07

Project summary	Measurable Indicators	Progress and Achievements April 2006 - March 2007	Actions required/planned for next period
<p>Goal: <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i> <i>The conservation of biological diversity,</i> <i>The sustainable use of its components, and</i> <i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>	<p><i>The</i></p>	<p>Progress continues to be made in the understanding of the marine biodiversity of Las Perlas archipelago in Panama and emphasis is being put on the sustainability of stocks of species of indigenous and commercial fishery interest.</p>	<p><i>(do not fill not applicable)</i></p>
<p>Purpose: Conservation management zoning structure implemented sustainably – through continued guidance based on sound scientific study and understanding of Las Perlas marine environment</p>	<p>- Site condition and exploited species monitoring programme functioning efficiently; - Effective participation by local stakeholders in productive workshops and resulting action agreements</p>	<p>Progress is being successfully achieved</p>	<p>Key actions are to continue as planned to ensure success of all outputs</p>
<p>Output 1. Selected site and species monitoring programmes set up from previous baseline surveys</p>	<p>Site condition and species population health assessments produced and used for action plans</p>	<p><i>Progress satisfactory and as anticipated</i></p>	
<p>Activity 1.1 Field Research Programme</p>		<p>Progress successful and continuing</p>	

Output 2. Participatory workshop programme for archipelago communities enhanced and developed	Stakeholders' active attendance/participation and demonstrated support for programme	<i>Progress satisfactory and as anticipated</i>
Activity 2.1. Participatory Workshops		Progress successful and continuing
Output 3. Issue-specific educational material produced for fishermen, schools and tourism developers/visitors	Draft material approved by all relevant stakeholders and zone communities	<i>Progress satisfactory and as anticipated</i>
Activity 3.1 Educational Material Production		Progress successful and continuing
Output 4. Research findings published and experiences shared through enhanced networking	Quality manuscripts reviewed & collaborative networking formalised	<i>Progress satisfactory and as anticipated</i>
Activity 4.1 Research Publication and Networking		Progress successful and continuing

Annex 2 Project's full current logframe

Project summary	Measurable indicators	Means of verification	Assumptions
<p>Goal: <i>To work with local partners in countries rich in biodiversity but poor in resources to achieve: i) the conservation of biological diversity; ii) the sustainable use of its components; and iii) the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>			
<p>Purpose:</p>			
<p><i>Conservation management zoning structure implemented sustainably – through continued guidance based on sound scientific study and understanding of Las Perlas marine environment</i></p>	<p><i>- Site condition and exploited species monitoring programme functioning efficiently; - Effective participation by local stakeholders in productive workshops and resulting action agreements</i></p>	<p><i>- AMP written official endorsement of finalised management plans for protected zones; - Field study reports; - Scientific peer-review publications; - Village meetings and stakeholder discussion reports</i></p>	<p><i>Government bodies and local stakeholders provide continued support for bioresource conservation through the new implemented Special Management Zone structure</i></p>
<p>Outputs:</p>			
<p>Selected site and species monitoring programmes set up from previous baseline surveys</p>	<p><i>Site condition and species population health assessments produced and used for action plans</i></p>	<p><i>PG dissertations/theses and local reports to AMP</i></p>	<p><i>Host institution staff remain in post to carry out and supervise studies</i></p>
<p>Participatory workshop programme for archipelago communities enhanced and developed</p>	<p><i>Stakeholders' active attendance/participation and demonstrated support for programme</i></p>	<p><i>Records of participation in workshop meetings and minuted actions</i></p>	<p><i>Identified local communities remain committed to continued participation</i></p>

Issue-specific educational material produced for fishermen, schools and tourism developers/visitors	<i>Draft material approved by all relevant stakeholders and zone communities</i>	<i>Copies of final material sent with DI annual project reports</i>	<i>N/A</i>
Research findings published and experiences shared through enhanced networking	<i>Quality manuscripts reviewed & collaborative networking formalised</i>	<i>Publication copies sent to Darwin, correspondence files/network websites available</i>	<i>Networking partners actively participate in experience exchange</i>
Activities:	Activity Milestones (Summary of Project Implementation Timetable)		
<i>Field Research Programme</i>	<i>May-June of Years 1 & 2 – UK Darwin project team (plus other PG research students) travels to Panama to join STRI personnel and Darwin Fellows in scientific survey work around Las Perlas. UK PhD Researcher (Agujetas) carries out fieldwork also in March of Year 2 and at other opportunities as appropriate. Throughout project, Panama team & Darwin Fellows undertake other fieldwork.</i>		
<i>Participatory Workshops</i>	<i>Under guidance of Dr Guzman (STRI Darwin Post-project co-ordinator) ‘Darwin’ workshops arranged at regular intervals as required, and when judged most appropriate (around 5 per year). Arrangements made for Darwin team members to be involved in other workshop/extension activities supported by other agencies.</i>		
<i>Educational Material Production</i>	<i>From October 2006 onwards, Darwin Fellow B (I Campbell) starts major effort to design and produce information leaflets and material on conservation/biodiversity aspects of Las Perlas for different target audiences and integrates this activity into STRI’s Marine Education Program.</i>		
<i>Research Publication and Networking</i>	<i>Planned peer-reviewed journal manuscripts and papers produced as soon as first major survey work (May-June 2006) is carried out, and subsequently over the Post-project period as further data and field results are analysed. Networking activity enhancement starts immediately and continues throughout and after Post-project.</i>		

Annex 3 onwards – supplementary material (optional)

Most supplementary material is in electronic version and archived in electronic form (pdf files, etc) on the project Website

Checklist for submission

	Check
Is the report less than 5MB? If so, please email to Darwin-Projects@ectf-ed.org.uk putting the project number in the Subject line.	Yes
Is your report more than 5MB? If so, please advise Darwin-Projects@ectf-ed.org.uk that the report will be send by post on CD, putting the project number in the Subject line.	No
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you completed the Project Expenditure table?	Yes
Do not include claim forms or communications for Defra with this report.	n/a