

# *Darwin Initiative for the Survival of Species*

## *Final Report*

### **1. Darwin Project Information**

Project Reference No.	162/12/011
Project title	Information incentives for CBD implementation in private reserves in Argentina and Paraguay
Country	Argentina and Paraguay
UK Contractor	The Natural History Museum
Partner Organisation (s)	Guyra Paraguay, Fundación Moisés Bertoni (Paraguay), Fundación Habitat y Desarrollo (Argentina)
Darwin Grant Value	£240,095
Start/End date	1 October 2003 to 31 October 2006
Project website	<a href="http://www.habitatydesarrollo.org.ar/Contenido.php?IdContenido=45">http://www.habitatydesarrollo.org.ar/Contenido.php?IdContenido=45</a>
Author(s), date	Sandra Knapp, Maria Peña-Chocarro (NHM), Hernán Maturo (Universidad Nacional de Rosario, FHD), Fernando Ardura (FHD), Maria Vera (FMB), Alberto Yanosky, José Cartes and Juana de Egea (Guyra)

### **2. Project Background/Rationale**

This project arose out of a previous Darwin Initiative project in Paraguay (DI 162/04/57 carried out with the Fundación Moisés Bertoni; see <http://www.internt.nhm.ac.uk/cgi-bin/botany/paraguay/>). While working in Paraguay, I (SK) was deeply impressed by the NGO efforts to involve private landowners in biodiversity conservation throughout the country. Another project, funded by AVINA Inc. (Accion para Vida y Naturaleza) and undertaken by the NHM in the Mayan region of Mexico and northern Central America, developed an information system for dissemination of biodiversity data to local people. Concomitantly, an Argentinian NGO, Fundación Habitat y Desarrollo, approached the NHM with the idea of initiating partnerships and joint projects. Coupling these ideas and events, the project team - consisting of staff from Guyra-Paraguay, Fundación Habitat y Desarrollo and the NHM - developed the current project for using information incentives to increase private sector involvement in biodiversity conservation in an important trans-boundary ecoregion, the Humid Chaco. The Fundación Moisés Bertoni (see above) was also involved in the project, as they operate a successful private reserve scheme in all of Paraguay. Most land in the Humid Chaco on both sides of the Argentina-Paraguay border is in private hands, landowners often own and manage ranches of thousands of hectares where cattle are the main “cash crop”.

The potential role of the private sector as an agent of CBD implementation has not been adequately assessed in either Argentina or in Paraguay. Private reserve programmes, in which private landowners are encouraged to set aside land for conservation, are particularly strong across the Humid Chaco, a highly diverse ecoregion considered vulnerable both locally and regionally. Landowners involved in existing private reserve schemes are aware of their

potential to generate income from ecotourism, but widely available information about the elements of biodiversity in these private reserves is severely lacking, both to landowners and to scientists and NGOs. This hampers the co-existence of biodiversity initiatives with more traditional productive activities such as cattle-ranching and agriculture. An assessment by local conservation NGOs in Argentina and Paraguay concluded that high quality information about Humid Chaco biodiversity components was an overall priority. We believed that the availability of such information could be used to provide incentives for more landowners to set aside reserves on their land for conservation purposes. The assessment by local partners concluded that establishing an exchangeable, scientifically rigorous base of information on selected components of local diversity into which landowners could tap was an essential step forward and a primary priority for action.

In the medium term and post-project, diversification of production in southern Paraguay and northern Argentina is essential to ensure conservation and sustainable use of the natural resource base upon which traditional production activities and income generating opportunities for local communities clearly depends. Enhanced knowledge of flagship components of Humid Chaco biodiversity, and its dissemination through workshops, capacity-building activities and user-driven information products will help to integrate biodiversity-related initiatives (e.g. eco-tourism, rural tourism, non-traditional uses of flowering plants) into ongoing national and international socio-economic schemes. Private landowners will be the prime beneficiaries of a diversified productive strategy, but benefits will certainly reach local people in the form of new options for non-traditional and sustainable jobs as field guides and interpreters, craftsmen, parataxonomists, etc.

An additional driving force behind the project was the local impetus towards designating more of the Humid Chaco trans-boundary region as a region of international conservation importance – this project is seen by local partners and others involved in the area as a first step towards this long-term goal.

### **3. Project Summary**

The primary purpose of this project was to achieve enhanced biodiversity conservation across the Humid Chaco trans-boundary ecoregion of Argentina and Paraguay.

Specific objectives of the project were:

- To identify and characterize private landowner involvement in CBD implementation across the region.
- To increase information on flagship components of Humid Chaco biodiversity and to provide a mechanism of technical co-operation between selected properties at both sides of the trans-national border.
- To produce a common, exchangeable and expandable database of knowledge on key flagship elements of Humid Chaco biodiversity.
- To provide training in the identification and monitoring of biodiversity in the flagship groups to local people both employed on private land and living in local communities.
- To establish common working practice and technical exchange between private landowners, local communities and governmental and non-governmental conservation organizations in the Humid Chaco trans-boundary region.

The principal changes to our objectives were in the training objectives. Originally we had intended to run two courses of a week to 10 days each, with approximately 20 participants on each, drawn from estancia staff and local community residents. It turned out that the properties we selected to work on (through a rigorous procedure) were not closely associated with large local communities (they were rather isolated) and that due to a prolonged drought in the region coinciding with the project, landowners were not keen to have staff absent for long periods to attend courses. Landowners were also not sure what the benefit to them would be at the start of the project, however, this changed drastically by the project end. We instead decided to run more, shorter training courses involving a wider section of the population

associated with the Humid Chaco. This was discussed with the DI Secretariat and approved. In fact, this led to us training more people, both in terms of sheer numbers and in terms of person-weeks of training, than in our original proposal.

Those CBD articles that best describe this project are (as detailed in our original application) Article 5 (Cooperation - through technical collaboration between regional organizations with interest in the preservation of the Humid Chaco ecosystem), Article 7 (Inventory and Monitoring – through the collections done over the course of the project and the field guides produced), Article 8 (In-Situ Conservation – through the development of tools for establishing guidelines for reserve identification), Article 12 (Research and Training – through the training provided in the UK and host countries), Article 13 (Public Education and Awareness – by reaching out to a wide variety of communities and civil society sectors in the Humid Chaco ecoregion through the work of the project and events), Article 17 (Exchange of Information – through the cooperation of the partners in the two host countries), and Article 18 (Technical and Scientific Cooperation – as for Article 17). To a certain extent we also feel the project has addressed some issues associated with Article 11 (Incentive Measures), albeit not in the exact way in which the Article was conceived. We feel that information incentives are an important part of an incentive package, and our experience in this project has shown us that this is indeed the case. See Appendix I for indicative percentages of match to the various Articles of the CBD.

We achieved or exceeded most of our objectives, particularly those in respect of providing information about key biodiversity elements. We provided information, training and produced an exchangeable database of information. Our analysis of private involvement in conservation and vegetation types in the Humid Chaco fed into a GAP analysis of Paraguay (see Publications in Appendix III). An important objective that we will need to monitor into the future to assess our success in achieving it is that of establishing common working practice and technical exchange across the border of Paraguay and Argentina. This certainly was the case during the project lifetime, but only time will tell if these common working practices are kept up into the future. We have significantly raised the profile of Humid Chaco biodiversity in the region, through PR events associated with the project and have more than exceeded our expectations for future interest in the project outputs and products.

One of the outputs we have not achieved is the establishment of a project website at the NHM, although the project does have web presence via FHD (see <http://www.habitatydesarrollo.org.ar/Contenido.php?IdContenido=45>). This was largely due to the re-launch and re-design of the NHM website, and the subsequent lack of internal resources to mount websites for staff at the NHM. Issues of how staff can be enabled to compose and present project websites through an NHM portal are still being discussed and have not to date had a satisfactory conclusion. In fact, this has not had a huge impact, as our target audience for a website was regional and Spanish-speaking not international and English-speaking (see comments below over web presentation of results of the project raised by reviewer of AR3).

Our assessment of our level of achievement against our purpose indicators is listed here:

1. Better characterization of private reserves: we have created a database of private reserves that is shared by project partners and have created vegetation maps that will enable future landowners interested in creating private reserves, or even in just conserving in an informal way part of their land, to assess the best area to conserve..
2. Availability and use of information on humid Chaco biodiversity; the publication of 4 field guides and an electronic product that will be used by the partners as an incentive has made information about biodiversity of the Humid Chaco far more accessible; students are already using the products to identify birds and the books were widely distributed to schools, universities and community centres.
3. Enhanced local biodiversity conservation capacity: staff trained in the project have greatly increased their level of knowledge and are better equipped to undertake independent conservation projects; trainees are equipped to use the products produced during the project and have a new appreciation of the biodiversity of their local area..

4. Conservation bodies working with private landowners to disseminate information and conserve biodiversity; new landowners have approached the partners interested in using the electronic resource and in discussing further work with the partners in biodiversity conservation, this is likely to increase over time.
5. Local people identifying and monitoring biodiversity: some trainees have formed groups to begin monitoring biodiversity in their local areas; alndowners have used the field guides to identify organisms on their properties.
6. Steps taken to establishing trans-boundary conservation area: partners involved in trans-boundary and national initiatives to strengthen biodiversity conservation through the planning of corridors – a network conservation area – but only first steps have been taken.

#### 4. Scientific, Training, and Technical Assessment

##### Research

Our research methodologies for this project have been the standard ones of field collection; our construction of the database generator for field guides used standard Access database programming techniques; data entry has been again standard. We have produced a standard glossary for terminology used in the descriptions of plants – too often botanists use obscure terms – this has been done in consultation with all the botanical partners and with many others involved in the project, this was tested in the first workshop held in September 2005. Over the course of the project, the NHM team has discussed with Guyra partners how best to maximise Guyra-Paraguay's database for public access. This has led to improved and enhanced advances in the institutional database; ultimately linking to the regional initiative IABIN, in which Guyra has become a regional leader.

Staff in the host countries directly involved in the research of the project are listed here. Of these, the three DI Fellows who received additional training in London at the NHM are starred. All of these young people have gone on to work in biodiversity conservation or teaching in the educational sector, and are keeping in contact regularly.

Juana de Egea (Guyra)\*

Maria Vera (FMB)\*

Hernán Maturo (Universidad Nacional de Rosario, FHD)\*

Richard Elsam (Guyra)

Oscar Rodas (Guyra)

Hugo Castillo (Guyra)

José Cartes (Guyra)

Ernesto Gamboa (FHD)

The project was presented during COP8 in Curitiba and generated considerable interest from participants from far outside Latin America interested in how best to involve the private sector (including private landowners, with whom we worked in this project) in conservation using the results of scientific research. Results of the project were disseminated widely in the southern cone countries of Brazil and Uruguay, including Paraguay and Argentina through other research activities of the project partners.

The research products of the project were submitted to internal (to NHM) peer review and to peer review among the botanical and ornithological communities in the region. This means we sent drafts of all guides to specialists who would be able to criticise them constructively, and incorporated their comments in the final products. Although this is not formal peer review in the strict sense, it is the most sensible sort of evaluation in projects such as these, whose

products need to be not only scientifically sound but locally appropriate.

### **Training and capacity building activities**

Training for local project staff consisted of on the job training – firstly for collecting, with a concentration on plants and on natural history photography, and secondly on bird identification and monitoring techniques. Research similarly largely involved standard techniques and methodologies and in the UK, focused on the identification and preparation of materials collected in the field, coupled with the development of the project guide-generating database. During the Fellow's stay in the NHM they received in-depth training in research skills, and prepared a manuscript for publication. Project staff and others at the partner institutions also received training in the use of Access databases and to a certain extent in database design. All staff associated with the project received this training, and the DI Fellows had more extensive training in aspects of database design and management whilst they were in London.

Our training of local people changed considerably from our original proposal. Rather than run wee to 10-day long courses we ran more, shorter courses of 2-3 days – people in the region are not able to attend longer courses; the area experienced a severe drought during the course of the project and employers were extremely reluctant to have employees leave for week-long courses. This means the training was slightly differently focused, but will have a similar impact in the region – as without the change we would have been unable to do any training at all. We targeted youth groups and local universities – where partners feel the greatest impact will be made. In this way we have been able to train more people (193 versus some 40) than originally planned, and have the training better fit for purpose within the humid Chaco situation. By changing the training implementation, we were able to reach those people who were in positions to train others, such as school teachers and community project leaders. In particular, the course done at the Escuela Pa'i Puku in June of 2006, has great potential for future benefit, as this school is a focal point for education and training in the Chaco (with 650 boarding pupils from all over the region).

## **5. Project Impacts**

The project purpose was to achieve enhanced biodiversity conservation through the provision of incentives for conservation on private land in the Humid Chaco. In order to measure enhanced biodiversity conservation, we will need to return to the region in a decade and see if more land is in private reserves or is being used sustainably for conservation. It is clear, however, that interest and enthusiasm for biodiversity conservation in the region has been greatly stimulated by the project, both by our work in the area with private landowners and through the production of field guides to trees and birds of the region.

As a direct result of their participation in the project, the owners of the Estancia Santa Asunción in Paraguay have begun the long process of declaring part of their land a private reserve. We are also pleased that the Fundación La Piedad, owners of large amounts of property in the Paraguayan Humid Chaco and important leaders amongst the landowner community, have expressed an interest in participating in future activities, this is critical as they have never before worked with conservation organisations nor expressed interest in becoming involved in reserve creation.

The project has concretely helped both host countries in their on-going inventory of biodiversity as part of meeting their obligations under Article 7 (Inventory and Monitoring). The enthusiasm shown by those in the private sector bode well for their future involvement in conservation on the national level in both countries. Plans for biodiversity impact at governmental level have incorporated the work of the project in Argentina, with the active involvement of project staff in the Administración des Parques Nacionales and Government of Formosa Chaco conservation plan and GEF bid (see Leverage below).

Of the two levels of trainees in the project we have been better at keeping track of those who

we trained in field and database techniques (listed below with their current employment). We have been less good at keeping track of the many local trainees we interacted with. We have kept in touch with the leaders of these groups, and will continue to involve them in future activities should project work continue (or rather when project work continues!).

Trainees in field techniques and database training:

Juana de Egea (Guyra) – currently working on project basis in Guyra, seeking funding to undertake further studies in biodiversity and taxonomy at the MSc level

Maria Vera (FMB) – currently working as staff botanist for the FMB

Hernán Maturo (Universidad Nacional de Rosario, FHD) – teaching biology to undergraduates at the UNR; during the course of the project he was awarded his MSc for work done as part of the project.

Richard Elsam (Guyra) – currently undertaking project work in various environmental NGOs in Paraguay

Oscar Rodas (Guyra) – working at Guyra as GIS specialist

Hugo Castillo (Guyra) – working at Guyra as staff ornithologist

José Cartes (Guyra) – working at Guyra as project manager in landscapes

Silvia Centrón (Guyra) – now managing Guyra's image database

Ernesto Gamboa (FHD) – working at FHD in Santa Fé as project manager

Edgar Garcia (FMB) – working at FMB in various projects involving private reserves

Freddy Ramirez (FMB) – currently working as parataxonomist in RNP Tapytá for FMB

Resulting from the training events done at the Universidad de Pilar in Paraguay, a group dedicated to bird observation and monitoring has been formed by the students who are actively pursuing funding for their activities. The Scouts in Formosa have instituted a local biodiversity observation programme, for which they are seeking support and further training.

Local institutions and civil society groups (principally Sociedades Rurales) have benefited from the work of the project in that their efforts and those of their members in the conservation of biodiversity on private land were recognised, sometimes for the first time. The project initiated the first conservation-oriented contact with Asociación Rural del Paraguay, whose members are all ranchers and farmers in Paraguay (and who are responsible for 15% of the GNP of the country). In Argentina, the Sociedad Rural de Formosa followed the results of the project with interest, and held workshops and events in their premises, thus opening up the dissemination of project results to all their members. This has led to increased contact and communication between these key players in the private sector and conservation NGOs, but has also introduced the government into the mix through the linking of project outputs to biodiversity conservation goals nationally.

Collaboration between the UK and host country institutions is strong, and we have prepared a Post-Project proposal to take the work of this project further. We are also actively exploring other ideas for work in the host countries in other habitats and regions. The relationships we have built over the course of the project have been positive and mutually reinforcing, this in our eyes is one of the lasting and most significant impacts of the project.

Everyone who lives in or near this habitat has benefited from the project in that there are now guides to the identification of key local biodiversity elements that did not exist before. At the closing event we heard many comments along the lines of the following (sent by a participant and a local resident in the Humid Chaco) *“I got the books and am so pleased by the quality and the information...aimed right at me! I can hardly wait to go to Golondrina and identify all my favorites.”*

Our training of teachers (e.g., Pa'i Puku school) and close contacts with other community leaders (e.g., Centro Cultural Melodia) will have a multiplicative effect, as these key

community players have contact with a very large part of the Chaco population and are critical to the dissemination of information and ethos about biodiversity conservation.

None of the project partners have identified any negative impacts resulting from the work of the project, in fact, they have indicated the impacts are overwhelmingly positive and likely to increase as time goes on.

## **6. Project Outputs**

All project outputs in terms of Standard Output measures are listed in Appendix II; publications are listed in Appendix III. Differences in Actual and proposed outputs are listed here by category, details are given in Appendix II.

### **Training Outputs**

- We undertook no formal degree level training over the course of the project. Some undergraduate students were given training as part of the training courses for local people (see above and details in previous Annual reports), but since this training was not part of a formal undergraduate curriculum we have treated these trainees as “local people” and counted them under output 6a. Despite the project itself not undertaking any formal degree training, one of our participants, Hernán Maturo, gained his MSc in Biology from the Universidad Nacional de Rosario (Argentina) using the work he did on the project.
- We trained more NGO staff (10 versus 7) in database techniques; achieved our training target for UK based training, and trained 10 (5 in proposal) people in field techniques over the course of the project.
- Due to the re-organisation of our local training, we substantially exceeded our proposed numbers of local people trained – we actually trained 193 people rather than approximately 40). This broadened the societal involvement in the project, but due to the shorter training courses meant that training given was less in-depth than it might have been if we had been able to implement our original plan.
- We provided 9.5 person weeks (5 in proposal) of database training, largely due to training more partner institution staff; the number of UK based training weeks was 36 as proposed; more training weeks were provided in field techniques (90 versus 75); and even though training for local people was substantially re-vamped and re-organised, we provided 56 person weeks of training (54 in proposal), achieving or surpassing all our training targets.

### **Research Outputs**

- In the proposal we did not provide a number of proposed weeks of UK staff time in the host countries, but over the course of the project UK staff spent 29 weeks, or approximately 1/5 of the total running time of the project in the host countries.
- We exceeded our proposed output number of formal documents produced to assist work related to species identification and monitoring. In the proposal we said we would produce 2 field guides of key biodiversity elements – we produced these to plan, but in addition produced two folding guides (one to birds and one to plants) and two identification manuals. The identification manuals were produced in part as training materials, but have been much in demand as general plant identification guides at the family level. Enclosed with this report are the 2 field guides and the 2 folding guides, the manuals have been sent with previous reports.
- One peer-reviewed paper was published in an edited book by Maturo & Prado (see Appendix III), and another on the vegetation of the Humid Chaco is being submitted to a peer-reviewed journal in either Paraguay or Argentina. In addition to the planned peer-reviewed research outputs, partners in the project, along with others interested in

the biodiversity of the Humid Chaco, have planned an edited book called *Manual del Bajo Chaco*, for which members of the project have prepared 5 of 6 chapters. These chapters have been internally and locally peer-reviewed, and a publisher is being sought. Two semi-peer reviewed publications resulted from work on the project, one an article in the Universidad Nacional de Rosario's in-house journal (Maturó & Prado) and another in the on-line journal Gap Analysis Bulletin (USGS), which used data from the project in a GAP analysis for Paraguay (Rodas et al.).

- An exchangeable database of information on key Humid Chaco biodiversity elements was one of the principal outputs of this project. This database, containing data on birds and woody plants (these elements were decided in consultation with users and landowners), has been provided to partners for their use in providing future incentives for biodiversity conservation on private land. From the database, a user can generate fact sheets and/or field guides from a set of criteria – a copy of the database has been sent to the Darwin Initiative, but should not be disseminated or demonstrated to others without permission of the project partners. Additionally we produced a database of private reserves and properties in the Humid Chaco ecoregion (held at each of the partner institutions) and a database of all plant material collected over the course of the project. The database made as part of the DI project 162/04/57 was enhanced with the plant collections made in Paraguay as part of this project; when the NHM institutional database is made available on-line these data will be openly accessible from the NHM website.
- Vegetation maps of all the properties on which we worked were prepared using satellite imagery and handed over to the participating landowners. This has materially helped in Estancia Santa Asunción's progress in establishing a private reserve on the land. These maps were also used to create a vegetation map of the entire Humid Chaco region, which forms part of the trans-frontier reserve planning process.
- Plant collections were made in both Argentina and Paraguay, these were handed over to the host countries as planned, and duplicates were distributed to international herbaria. In Argentina this went as planned for the entire project period, but difficulties with obtaining export permits due to drastic changes in law in Paraguay were finally only resolved as the project was finishing. We did get the plant specimens, however, and are identifying and distributing the duplicates now.

### **Dissemination Outputs**

- In our proposal we said we would have two major workshops to disseminate project findings and objectives; we in fact held 7 workshops/conferences over the course of the project, including the initial conference/launch in Paraguay. In the middle of the project we held two seminar/workshops (one in Asunción and one in Formosa) to present preliminary findings and to assess interest in the project work. These were very successful and were a good addition to our planned outputs as they significantly increased the dissemination of project ideas in the region and have increased local interest in ways we did not expect (especially among young people, the target for our Post-Project application). During each of our intermediate workshops we spent part of each in the field in one of the participating properties demonstrating project activities and discussing vegetation types and their conservation with workshop participants. This was an important way in which we were able to disseminate project work in a concrete and positive way. In March 2005, in collaboration with the Argentine Embassy, we held a half-day event in the NHM in conjunction with a visit of the Argentine-British Chamber of Commerce visit to London. This event was attended by ca. 50 people from NGOs, GOs, and the private sector (see Annex 4). At the end of the project we held three conference/seminars, in Buenos Aires, Asunción and Formosa, where we presented the project products and discussed with a large audience the future of biodiversity conservation in the Humid Chaco ecoregion. Representatives of the ministries of Environment, Treasury, National Parks and Economy were present at the Buenos Aires event, as were the focal points for the

CBD and GTI, and key landowners and companies. The Minister of the Environment of Paraguay spoke at the event in Asunción, which was held to a capacity crowd in the Scientific Society of Paraguay, which included CBD and GTI focal points and a large number of interested landowners and members of civil society.

- Project staff attended 6 conferences where the work of the project was disseminated, these were: International Botanical Congress, Vienna Austria – poster; NHM Departmental seminars given by DI Fellows; Darwin Initiative seminar Feb 2006; COP8 side event organised by Guyra Paraguay March 2006; Congreso Latinoamericano de Botánica in Santo Domingo – poster; Brazilian National Botanical Congress, Gramado, Rio Grande do Sul – SK keynote speech on the role of taxonomy in biodiversity conservation included work of the project. Knapp also used the work of the project as an example in over 15 public presentations over the course of the project; these are not included in the total outputs, as they were not necessarily conferences, nor were the presentations exclusively about project work.
- Press releases and publicity articles were produced as events occurred over the course of the project, these were most effective in the host countries and resulted in many interviews in all dissemination media (TV, radio and print). Details of these can be found in Appendix II, and copies have been sent with previous (and this) report. It is regrettable that newspaper articles has been deleted from the Standard Output List, as in our experience this is one of the best ways to disseminate the work of projects over the long term. Newspapers make the rounds for months and months in less-developed rural areas – we have had local people saying they had heard about the project from these articles long after they were published. Media reports about the project have ranged from reports of events to long feature articles about conservation and its importance to national society. We think we have far exceeded our expectations in this output category.

### **Physical Outputs**

- Physical assets in the form of computers, printers, software and field equipment (dryers and presses) have been handed over to the host institutions. We have also donated books to the host country partners, Universidad Nacional de Asunción and other local universities for their libraries. In total the estimated value of physical assets left in host countries is approximately £.

The dissemination of project outputs has been undertaken by the project partners, through word of mouth and local advertising. Field guides resulting from project work will be sold through the partners and local book shops, and this cost will be borne by the host country institutions. Field guides will be sold until they run out, and any further publication of second editions will need to be funded then. Copyright is jointly owned by all partners, so joint efforts will be made should this occur. Use of the electronic biodiversity information resource (field guide generator) will be channelled through the project partners, as it was intended to be a tool for helping bring landowners in the region into contact with the conservation organisations. The costs of this, and the printing of personalised field guides, will be borne by the partners, using equipment obtained from the project in its lifetime.

## 7. Project Expenditure

Below please find a table with the project budgeted expenditure and the actual expenditure over the entire grant period. Column 4 is the difference between original budget and actual expenditure, where this differs by more than 10% the reasons are detailed below.

	<b>Total Budget</b>	<b>Total Expenditure</b>	<b>Difference between Budget and Expenditure</b>
Staff costs <sup>1</sup>			
Rent, rates, heating, lighting, cleaning			
Postage, telephone, stationery			
Travel and subsistence			
Printing <sup>2</sup>			
Conferences, seminars etc <sup>3</sup>			
Capital items			
Others * <sup>4</sup>			

1. We underspent slightly on staff costs, largely due to exchange rate fluctuations; also see point 4 below.
2. Printing was our largest differential in budget to actual expenditure – this is in part due to our printing more material than originally planned (4 rather than 2 guides) and to the fact that the costs for the design and lay-out of the guides (in essence staff costs for the person who did the work) were charged as part of the overall printing cost by the company that did the work. They were not prepared to separate the two categories, and as they were clearly the best value for money for the work and did such a good job we included all these costs in the Printing category.
3. We overspent in the conferences and seminars category due to the re-arrangement of the training component of the work and to our holding more seminars (in Asunción, Buenos Aires and Formosa) at the end of the grant period that originally planned. All of these were important to the dissemination of project outputs and products.
4. Included in this category are audit, satellite images, artwork for the guides, and specimen preparation costs. Artwork for the guides was somewhat overspent, due to our preparation of more illustrations than originally planned (we had originally planned to only use photographs for the bird guide, and we included more species of trees than originally planned). The other main reason for overspend in this category was detailed in our letter of 20 February 2007; due to our problems with export of plants from Paraguay, and its final resolution just at the end of the grant period, all specimen preparation and duplicate distribution will need to be done from NHM rather than from Paraguay in order to expedite the availability and usefulness of these specimens. These specimens have been placed first in the priority order for processing and are being done as quickly as possible.

## 8. Project Operation and Partnerships

Project activities were undertaken with the original three host country partners, each NGO coordinating and leading work in their own country. This meant that Guyra and FMB worked on the project in Paraguay and FHD in Argentina. Since the local project coordinator (Juana de Egea) was based in Guyra Paraguay, they were *de facto* the most active of the three NGO partners, but all contributed to project activities. All three of these NGOs are active in biodiversity conservation in the region, but the project brought them together in a region that had previously not been the principal focus of their work. All three partners actively advise their CBD focal points and local governments as to biodiversity issues, and Guyra has been given responsibility for the clearing mechanism for the CBD by the Paraguayan Ministry of the Environment. Throughout the course of the project those responsible for biodiversity strategy in both host countries have been invited to project events and actively given information about the project (see list of entities who attended project events in Paraguay and Argentina in Annex 4).

During the course of the project the Executive Directors of two of the host country partners changed – Yan Speranza took over from Nancy Cardozo as the Director of the Funación Moisés Bertoni, and first Pablo Tabares, then Sergio Recio, took over from Javier Alvarez at Fundación Habitat y Desarrollo. Continuity was maintained through other NGO staff, and these changes did not affect the day to day running of the project. In fact, these changes represented an opportunity to engage more players with the work of the project, and this has resulted in wider dissemination and support for project activities.

All project activities were planned with the host country partners and activities and project work was adjusted and modified with them. The principal partner members undertaking plant collection in the field were Juana de Egea (Guyra), Maria Vera (FMB) and Hernan Maturo (FHD). These three young botanists also were the partners who came to London as Darwin Fellows for three months of training mid-project. This mid-project training period was very helpful in building a team ethos and in really working together on some of the ultimate project outputs. Plans for collecting and training were changed in response to local circumstances (see below) – this was done together. Richard Elsam (mostly), José Cartes and Hugo Castillo did the ornithological observations and data gathering. It is important to emphasize in this regard that the project has been collaborative and organic from the start, all project personnel and partners have been involved in planning and implementing project activities. This has meant some changes and readjustments, but has resulted in strong, lasting partnerships built on equality and cooperation.

During the course of the project a two day training workshop in plant identification and collection techniques (biodiversity monitoring) was held at the Reserva Natural Privada Tapytá in Caazapá Department, Paraguay. The training course was requested by the reserve guards, who were interested in how to identify and monitor the plant diversity for which they were responsible. The FMB (one of our project partners) has management responsibility for the Tapytá reserve, and they were the prime movers in instigating the training course. Although the Tapytá reserve is not physically within the humid Chaco ecosystem, local project staff received excellent training and experience in running workshops and in the preparation of manuals for use in these workshops. From this initial training, other groups have become interested in repeating the course in other key conservation areas such as San Rafael and Ñeembucú, zones to the south of Tapytá within Paraguay. This activity was additional to those undertaken in the Humid Chaco, and demonstrates the collaborative nature of our relationships in this partnership.

Other international partners were not directly involved in project activities, although the herbaria in Paraguay (FCQ in particular through the participation of Dr. Fatima Mereles) provided the venue for plant identification in-country, and the Universidad Nacional de Rosario (Argentina) was the base for Hernán Maturo; Dr. Darien Prado, his professor, came on some of the field trips with us. BirdLife International coordinated the side event at COP8

where work of the project was discussed.

Level of host partner participation in biodiversity activities is very high, and will continue to be so, as all three are integral to the implementation and dissemination of CBD targets and goals in their countries. The project has been successful in involving the private sector and communities, and this will need to continue in order to truly achieve conservation in the Humid Chaco.

## **9. Monitoring and Evaluation, Lesson learning**

We monitored the project through constant communication – the most effective way to keep on top of activities on the ground. Our outputs were undertaken jointly, thus ensuring their fit for purpose. We also closely monitored outputs in-country, with the effects of, for example, publicity about the project being examined after key project events. These efforts however, did to a certain extent take time away from the actual interactive work on the project – whose results were our primary aim. Our indicators of achievements were concrete, such as actual participation of landowners in the project, numbers of collections made, numbers of newspaper articles published, amount of field work undertaken as a team. The team members responsible for field work and database population in both Paraguay and Argentina prepared monthly reports of field activities and presented some of these on the project website (<http://www.habitatydesarrollo.org.ar/>). These reports were closely monitored by the London team, and when the three DI Fellows were in London, activities were discussed and analysed in order to improve communication and outputs from the project.

The project was largely one of scientific data collection and dissemination, and our indicators for identifying our achievements were largely the production of actual physical products. The enthusiasm with which these products were received to us clearly demonstrates the value of the project, but measuring this enthusiasm was not part of the original project milestone design and thus we did not produce quantitative measures of it. This will be important to incorporate in future project designs.

The main problems we faced during the course of the project were 1) the slow start, leading to work pile-up at the end of the project, 2) the necessity to change the training delivery to better achieve our goals within the local context and situation, and 3) the serious problems we encountered when Paraguayan law suddenly changed and prohibited the export of any biological material. Our slow start was in part due to activity in partnership building, which in the end paid off. All this meant is that we had to work extra hard in the last few months of the project, but we enjoyed it! This slow start was also due to the special environmental circumstances in the region, due to a prolonged drought, plants were not in bloom. We needed also to re-deploy our training (detailed above) which meant that we put more of it into the latter parts of the project than we had planned. This did not have hugely adverse effects, but did mean that we delivered a different sort of training than we had planned. Our single biggest problem was the government decision to ban the export of all wild nature from Paraguay in early 2005. The reasons for this change in law were complex, and not appropriate to detail here, but the inability to export the material meant that the Darwin Fellows were unable to spend some of their time in London identifying their own material, which was a pity. Instead, we had to pull together the materials (journal articles, books etc.) to send back so that identifications could be done without access to the reference collections of the NHM on the material before it was exported. We therefore prioritised identification of trees as they were important for the guide, and did as much of the rest as possible. Project staff did an excellent job, and the project outputs did not suffer as a result of this ban. Fortunately, through persistence and many meetings with government officials from the Minister down, we managed to export the material shortly after the project ended. We are now making identification and the distribution of duplicates to specialists a priority at the NHM, and should soon have this task completed (perhaps by early May). At the end, all of these were really only small blips in our progress, rather than serious problems that impeded project work.

We did not include external evaluation as part of our project plan, other than the usual evaluation to which we submitted project products such as field guides and papers. In our yearly meetings we internally evaluated our progress towards our objectives and adjusted the project plan accordingly. It would be helpful to have an independent field evaluation for a project such as this; one that involves so many partners across frontiers.

We feel there are a few key lessons we have learned from this project, we list them below:

1. Collaborative projects where all partners are contributing to project management and outputs are sometimes very slow to start. We think we were a bit overoptimistic in our plans, but got there in the end. Collaboration, while difficult sometimes, is very much worth it in the end, not only does the project produce good, locally relevant outputs, but the relationships and partnerships built are truly lasting.
2. Be prepared to change your mind about the delivery of particular objectives when confronted with a reality that is slightly different to that you imagined or planned for. We feel that by re-deploying our training effort we reached more people and had greater impact than had we doggedly stuck to our original plan.
3. Working across frontiers is difficult, especially when the governmental systems (in our case a federal versus unified system) are very different. This means that some of the ideas one has in the beginning, of achieving reserves or changing the way people do things, may not be achievable as they were first conceived. Progress, however, can be made, and flexibility is critical to making things move forward.
4. When dependent upon export of specimens, make sure you have a Plan B (and maybe even a Plan C) should the law suddenly change for whatever reason! Collecting and export permits are usually straightforward and no problem, but in our situation a change in the law prohibited any export. If we had not prioritised the tasks and mobilised the resources to enable identification in-country we would have had big problems. The lesson here is perhaps to be ready for anything, however unlikely it might seem.

#### **10. Actions taken in response to annual report reviews (if applicable)**

We shared all report reviews fully in the partnership and wrote responses to issues raised as a joint activity. Reviewers had identified as problematic the intensity of training in the latter stages of the project, the perceived more active participation of Paraguayan over Argentine partners and had a misconception that we were aiming to have formal MOUs signed between landowners and governments for biodiversity conservation on private land. For a detailed review of reviewer concerns and our responses please see HR Report for 2005 (an attachment to HYR 2). A copy of this response is attached as Annex 3 below.

The review of AR3 indicated we should respond to various issues, these are detailed below:

1. The reviewer wished to see progress against purpose indicators detailed. This we have done in this report, although not perhaps in the way the reviewer wanted.
2. It was suggested we put the guides/manuals/etc on the Internet to improve dissemination. We have deliberately not chosen to do this at this stage, as funds to construct and maintain a website with all results presented were not part of the original project plan – in our experience it is no trivial matter to repackage material for web presentation, it is often perceived as a trivial task, but it is not. Presentation of biodiversity material for ideal, well-thought out web consumption requires a careful analysis of the audiences to be targeted, similar to that undertaken for the audiences for the printed field guides. Before we put material on the web, we prefer to undertake the careful study needed to make this material really accessible (i.e., presentation, disability legislation etc.). In addition, the information we have compiled in the field guide generator (database) is meant to be an incentive for landowners to work with the partners in setting up private reserves and entering into conservation related work. If it were all openly available over the Internet this would destroy the entire premise of the project – providing information incentives! The

collection data from the specimens we have collected over the course of the project will be available over the NHM website, and with these records photographs taken and used as part of the guides will also be made available.

3. The reviewer questioned the capacity of the partners to identify plants post-project. This indeed has been a worry for the Paraguayan collections, but fortunately, just as the project was ending, we managed to get the collections exported to London. This means that NHM staff will have a bigger job identifying this material, but at least we can send it to specialists now and distribute the duplicates. The material is all databased already, and since it arrived (late December) we have made good progress in identifying priority material (largely that for the guide to aquatics that is a future product). The material for the guides already published was identified in Paraguay and Argentina, through the hard work of project staff, so this delay in getting the material exported did not materially affect the achievement of project objectives other than the identification of all material collected, always an aim, but never truly achievable in the tropics.
4. It is suggested that we have made little progress towards establishing a trans-frontier reserve, but how one views this depends on what one means. We, as a single project, have not set in motion the legal machine to create a trans-frontier reserve, it is true, but we feel we have made significant progress in laying the ground work (progress in the regional context) for constructive dialogue in the future. Partners in the project were part of a proposal to create a Biosphere Reserve for the Humid Chaco which unfortunately was not successful, but another attempt will be made. The GAP analysis made for Paraguay is a good first step, and the GEF bid for Formosa is another step. Although these initiatives are in each of the host countries, this has more to do with how funds are dispersed than with lack of desire for a trans-frontier reserve. The seminars and workshops held as part of the project brought together for the first time many of the key players from the two countries, meaning that a conversation has begun about how best to balance production and conservation in this linked region. All of this we consider is progress towards a trans-frontier protected area – which in reality, given that most of the land is in private hands, be a series of linked small areas. All this depends on interest and enthusiasm for humid Chaco biodiversity conservation, one of our most salient achievements.
5. The reviewer points out that we have not provided evidence of involvement or dissemination of information to government agencies in either country, we hope the list in Annex 4 will go some way to answering this criticism. We have had extensive contacts with officials in both countries, both at local and national level. All have expressed interest in the work of the project and have provided letters of support for our Post-Project application.
6. The reviewer pointed out we had a lot of work to do in the last 6 months of the project, but project staff worked hard and the outputs were achieved and even exceeded in several cases. This, I feel (SK) is a tribute to the collaborative and strong relationships built up over the course of this project, and the truly collaborative spirit of the entire enterprise.

## **11. Darwin Identity**

The project was actively advertised as a Darwin project, and the logo was used on all project products. The Initiative was explained in full at all media interviews undertaken during the project lifetime – people are very interested in the Initiative and how it works, where it works and are really impressed that the UK government takes biodiversity so seriously. While in the UK Hernán Maturo, María Vera and Juana de Egea were identified as Darwin Fellows, and corresponded and communicated with their embassies as such.

Our extensive media dissemination in both Argentina and Paraguay provided many opportunities to advertise the Darwin Initiative and its goals and objectives. In all interviews (of which there were many) the Initiative was explained in detail, and the Darwin identity

appeared in many of the resultant articles, especially in the newspapers. In the host countries, many sectors of society are aware of the Darwin Initiative, conservation NGOs being the most prominent, but national scientific institutions and government departments are also aware of the DI. The work of this project has pushed this understanding and awareness out into a much broader section of civil society.

In both host countries the project was seen as an initiative that was special in involving several organisations and in being focused on the transfer of expertise from the UK to the region. In each of the host country institutions the project has its own clear identity, and was always presented to the outside world in those terms.

## 12. Leverage

Over the course of the project the NGO partners participated in other biodiversity conservation activities, for which information produced by the project was an important component.

Database use and maintenance will be crucial in the fund-raising opportunities open to partner NGOs in the future. Training obtained during the course of the project, and the handing over of the biodiversity database will enhance this capability significantly in all the partner institutions. This training as part of the project significantly helped Guyra become a leader in IABIN's I3N initiative and to win a grant of \$ for database management.

With the help of UK project staff, but really largely as their own initiative, Guyra also obtained funding from NASA and the University of Maryland to monitor landuse changes using satellite imagery (building on project work) and from GEO (Group of Earth Observation) obtained a grant of \$ for co-leadership to define global ecosystems. These initiatives are building on the work of the project, and involvement in the project helped leverage these funds.

Based on the format of the folding field guide produced first for birds and then for plants of the Humid Chaco, Guyra has obtained funds (or used funds in other projects) to produce similar materials for other parts of the country (sent to DI as examples).

Based on the work undertaken in the project (and that done in a previous DI project in the Mbaracayú region, DI project 162/04/57), staff from the FMB obtained a grant of approximately \$ from the World Bank competition "Feria de Desarrollo" for the production of a fern field guide done by young people in the villages close to the Reserva Natural Privada Tapytá. This project, in which some of the NHM staff did some training, resulted in an excellent field guide to the ferns of the forest, additionally revealed previously untapped talents in some of the participants. One young man, Sebelio Bóveda, is a natural illustrator, and was hired to do some of the illustrations of the field guides for the Humid Chaco project and is now attempting to attend university with the idea of pursuing a career in botanical illustration.

In Argentina, FHD, together with other NGOs, the Administración des Parques Nacionales and the government of the province of Formosa, are presenting a project to the GEF called the Formosa Humid Chaco Initiative (Iniciativa de Chaco húmedo formoseño), where conservation activities will be carried out in three corridors. At the first workshop for this initiative, FHD organised a round table session at which staff presented the work of the Darwin Initiative project. FHD, with the private sector company Grupo Arrayanes and the provincial governments of Formosa, Chaco and Santa Fé, are presenting a project to the Fondo Federal de Inversiones (Argentine government) a project focusing on the improvement of native Chaco species using biotechnology methods, together with complementary activities in sustainable forestry, agriculture and ranching. They have used access to the information produced during the Darwin Initiative project as a key part of their application, and would not have been able to propose the project without having been partners in the Darwin project. Both these proposals are pending.

All three host country project partners have very creatively used the work of and the experience they gained during the project to leverage additional funds for related work

or to participate in proposals for future work related to the project. All partners have incorporated the ideas of the project and its results into their fund-raising and future work.

### **13. Sustainability and Legacy**

The books and other publications (folding guides) that were produced from project work are a tremendous legacy in a region where few books exist and where schoolchildren know more about elephants and giraffes than about the biodiversity of their own region. The database and field guide generator will be a source of biodiversity information for anyone who wants it, and will serve to link the project partners with other members of civil society. Project staff and resources will continue to work within the partner NGOs after the project ends and the partners have committed to further working together to help aid biodiversity conservation in this transboundary region.

The folding guide format we used for our first project product has been used for a series of other such products by Guyra on birds of other parts of Paraguay. The format has been very successful and is likely to be further “copied” by other projects.

We have submitted a completely jointly written Post-Project proposal to the Darwin Initiative in order to expand this work and to use the tools produced during this project in training and monitoring. This idea was generated within this DI project, but the impetus and focus of it came from the users of the information we generated. Even if this Post-Project is not successful, all partners are committed to future working together to help bring these goals forward.

### **14. Value for money**

The highest costs in the project were in staff time and in training, both of which have resulted in significant benefits, both to the people involved and to the institutions in which they work. The training period in London provided unparalleled benefits for the three young Darwin fellows who came – they have improved their research skills and are already participating and developing other projects using the knowledge they have gained.

In our opinion, despite not doing some of the things we had set out to do in the way we had planned, this project has been incredibly good value for money in a variety of ways. The number of publications resulting from project worked exceeded our targets (4 field guides of various formats, several training manuals and posters at international congresses), and we brought training in the importance of biodiversity to a very large number of local people of many different sorts, from rich landowners to teachers in schools to young people in the region. The intense media interest in the project meant that the message about conservation and the broad involvement of civil society was disseminated far more widely than we had initially imagined.

Enthusiasm for conservation in the private sector was significantly raised in both Argentina and Paraguay, a slightly nebulous benefit and one that is difficult to measure quantitatively, but a benefit that will have long-term impact on the region as a whole.

## 15. Appendix I: Project Contribution to Articles under the Convention on Biological Diversity (CBD)

Please complete the table below to show the extent of project contribution to the different measures for biodiversity conservation defined in the CBD Articles. This will enable us to tie Darwin projects more directly into CBD areas and to see if the underlying objective of the Darwin Initiative has been met. We have focused on CBD Articles that are most relevant to biodiversity conservation initiatives by small projects in developing countries. However, certain Articles have been omitted where they apply across the board. Where there is overlap between measures described by two different Articles, allocate the % to the most appropriate one.

<b>Project Contribution to Articles under the Convention on Biological Diversity</b>		
<b>Article No./Title</b>	<b>Project %</b>	<b>Article Description</b>
<b>6. General Measures for Conservation &amp; Sustainable Use</b>		Develop national strategies that integrate conservation and sustainable use.
<b>7. Identification and Monitoring</b>	30	Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.
<b>8. In-situ Conservation</b>	5	Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
<b>9. Ex-situ Conservation</b>		Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
<b>10. Sustainable Use of Components of Biological Diversity</b>		Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.
<b>11. Incentive Measures</b>	5	Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.
<b>12. Research and Training</b>	20	Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).

<b>13. Public Education and Awareness</b>	30	Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
<b>14. Impact Assessment and Minimizing Adverse Impacts</b>		Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
<b>15. Access to Genetic Resources</b>		Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair and equitable way of results and benefits.
<b>16. Access to and Transfer of Technology</b>		Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
<b>17. Exchange of Information</b>	10	Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
<b>19. Bio-safety Protocol</b>		Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research.
<b>Total %</b>	<b>100%</b>	<b>Check % = total 100</b>

## 16. Appendix II Outputs

Please quantify and briefly describe all project outputs using the coding and format of the Darwin Initiative Standard Output Measures.

Code	Total to date (reduce box)	Detail (←expand box)
<b>Training Outputs</b>		
1a	Number of people to submit PhD thesis	N/A
1b	Number of PhD qualifications obtained	N/A
2	Number of Masters qualifications obtained	1 MSc degree obtained for work done on the project by Hernán Maturo
3	Number of other qualifications obtained	N/A
4a	Number of undergraduate students receiving training	N/A
4b	Number of training weeks provided to undergraduate students	N/A
4c	Number of postgraduate students receiving training (not 1-3 above)	N/A
4d	Number of training weeks for postgraduate students	N/A
5	Number of people receiving other forms of <b>long-term</b> (>1yr) training not leading to formal qualification (i.e., not categories 1-4 above)	N/A
6a	Number of people receiving other forms of <b>short-term</b> education/training (i.e not categories 1-5 above)	10 people trained in database techniques in host countries; 3 Darwin Fellows trained in UK; 10 people trained in plant collecting and bird observational techniques over course of project; 193 local people trained (for details see above and previous reports)
6b	Number of training weeks not leading to formal qualification	9.5 person weeks of database training in host countries; 36 training weeks provided to DI Fellows in UK; 90 person weeks of field training in plant collecting and bird observational techniques; 56 person weeks of training provided for local people
7	Number of types of training materials produced for use by host country(s)	See below for Manuals (counted here as identification guides)
<b>Research Outputs</b>		
8	Number of weeks spent by UK project staff on project work in host country(s)	29 person weeks were spent by UK project staff in host countries
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s)	N/A
10	Number of formal documents produced to assist work related to species identification, classification and recording.	6 published documents produced; 2 book format field guides (birds and trees ) and 2 folding field guides (birds and common plants * additional products); 2 manuals for collecting produced (additional products)
11a	Number of papers published or accepted for publication in peer reviewed journals	1 (book chapter)

<b>Code</b>	<b>Total to date (reduce box)</b>	<b>Detail (←expand box)</b>
11b	Number of papers published or accepted for publication elsewhere	2 (semi-peer reviewed)
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	3 databases produced; 1 of private reserve inventory; 1 of collections made during the course of the project; 1 of information about key biodiversity elements (trees and birds)
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	1 database enhanced (update of database made on previous DI project 162/04/57)
13a	Number of species reference collections established and handed over to host country(s)	2 plant collections, one to Argentina and one to Paraguay; 1 collection of photographs handed over to each host country
13b	Number of species reference collections enhanced and handed over to host country(s)	N/A
s.n.	Products for use by participating landowners (could be thought of as management plans, but we feel this is not quite what these are!)	7 vegetation maps prepared for and handed over to participating landowners

<b>Dissemination Outputs</b>		
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	7 conferences organised; 1 at beginning of project; 2 at midterm; 3 at end of project; 1 in London mid-project with British-Argentine Chamber of Commerce
14b	Number of conferences/seminars/ workshops <b>attended</b> at which findings from Darwin project work will be presented/ disseminated.	6 conferences were attended where work of project was disseminated and/or discussed (including COP8 in Curitiba)
15a	Number of national press releases or publicity articles in host country(s)	7 national press releases sent out in host countries over course of project
15b	Number of local press releases or publicity articles in host country(s)	3-4 local publicity articles in host countries (mostly Formosa, Argentina)
15c	Number of national press releases or publicity articles in UK	1 national publicity article in UK (about Chamber of Commerce event in NHM)
15d	Number of local press releases or publicity articles in UK	N/A
16a	Number of issues of newsletters produced in the host country(s)	N/A
16b	Estimated circulation of each newsletter in the host country(s)	N/A
16c	Estimated circulation of each newsletter in the UK	N/A
17a	Number of dissemination networks established	N/A
17b	Number of dissemination networks enhanced or extended	N/A
18a	Number of national TV programmes/features in host country(s)	1 national TV feature in Paraguay; 1 national TV interview in Argentina
18b	Number of national TV programme/features in the UK	N/A
18c	Number of local TV programme/features in host country	N/A
18d	Number of local TV programme features in the UK	N/A
19a	Number of national radio interviews/features in host country(s)	14 national radio interviews done in Paraguay and Argentina
19b	Number of national radio interviews/features in the UK	N/A
19c	Number of local radio interviews/features in host country (s)	2 local radio interviews done in Formosa, Argentina
19d	Number of local radio interviews/features in the UK	N/A
S/N	Number of national and local newspaper articles in host countries (this seems to have disappeared from the Standard Output list for some reason – this is an incredibly important means of dissemination!!)	15 national and local newspaper articles appeared over the course of the project in the host countries, ranging from short columns to full page profiles of the UK scientists and their motivations for working in-country
<b>Physical Outputs</b>		
20	Estimated value (£s) of physical assets handed over to host country(s)	Approximately £of physical assets (computers, printers, plant dryers and presses, books) handed over to host countries
21	Number of permanent educational/training/research facilities or organisation established	1 permanent training facility established in form of database of biodiversity of Humid Chaco accessible through NGO host country partners

22	Number of permanent field plots established	N/A
23	Value of additional resources raised for project	Ca. £of in-kind and other contributions

## 17. Appendix III: Publications

Provide full details of all publications and material that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website Publications Database that is currently being compiled.

Mark (\*) all publications and other material that you have included with this report (sent separately to ECTF)

<b>Type *</b> (e.g. journals, manual, CDs)	<b>Detail</b> (title, author, year)	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. contact address, website)	<b>Cost £</b>
Folding field guide*	<i>Aves del Chaco Húmedo</i> (2005, reprinted 2006)	Guyra-Paraguay, NHM, FMB, FHD, Asunción, Paraguay	Guyra, FMB, FHD, NHM	Free or nominal donation of \$0.40
Field guide*	<i>Aves del Chaco Húmedo</i> by Richard Elsam (2006)	Guyra-Paraguay, NHM, FMB, FHD, Asunción, Paraguay	Guyra, FMB, FHD, NHM	US\$16
Folding field guide*	<i>Plantas del Chaco Húmedo</i> (2006)	Guyra-Paraguay, NHM, FMB, FHD, Asunción, Paraguay	Guyra, FMB, FHD, NHM	Free or nominal donation of \$0.40
Field guide*	<i>Arboles y arbustos del Chaco Húmedo</i> by M. Peña-Chocarro, J. de Egea, M. Vera, H. Maturo & S. Knapp (2006)	Guyra-Paraguay, NHM, FMB, FHD, Asunción, Paraguay	Guyra, FMB, FHD, NHM	US\$16
Database on CD*	<i>Biodiversidad del Chaco Húmedo</i> (NHM, Guyra, FMB, FHD, 2006)	Guyra-Paraguay, NHM, FMB, FHD, Asunción, Paraguay	Available via interaction with partners only, not for sale or distribution	N/A
Book chapter*	Los bosques del Chaco Húmedo Formoseño: tres estados contrastantes de conservación en tierras privadas by H. M. Maturo & D.E. Prado (2006) in <i>La Situación Ambiental Argentina 2005</i>	Fundación Vida Silvestre de Argentina	Fundación Vida Silvestre de Argentina ( <a href="http://www.vidasilvestre.org.ar/noticias/libr.asp">http://www.vidasilvestre.org.ar/noticias/libr.asp</a> )	Not known
Manual	<i>Manual de Técnicas de Colecta Botánica e Identificación de Plantas Comunes</i> by S. Knapp, M.-C. Peña-Chocarro, J.I de Egea J. & M.I. Vera J. (2005)	FMB & Guyra-Paraguay, Asunción, Paraguay	Guyra-Paraguay, FMB – not for sale, intended for project use	N/A

Manual	<i>Taller de Técnicas de Colecta Botánica de Helechos</i> by M. Peña-Chocarro & M. Vera (2005)	Guyra-Paraguay & FMB, Asunción, Paraguay	Guyra-Paraguay, FMB – not for sale, intended for project use	N/A
Journal article*	Tres estados contrastantes de conservación de bosques chaqueños en tierras privadas en Formosa by H.M. Maturo & D.E. Prado in <i>Agromensajes</i> 17: 45-48 (2005)	Universidad Nacional de Rosario, Rosario, Argentina	UNR, Argentina ( <a href="http://www.fcagr.unr.edu.ar">http://www.fcagr.unr.edu.ar</a> )	Not known
Journal article	Ecosystems Gap Analysis in Paraguay by O. Rodas, R. Sayre, A. Grosse and J. Mosesso in <i>Gap Analysis Bulletin</i> 14 (2006)	USGS	<a href="http://www.gap.uidaho.edu/Bulletins/14/Rodas.htm">http://www.gap.uidaho.edu/Bulletins/14/Rodas.htm</a>	Publicly available on Internet

## 18. Appendix IV: Darwin Contacts

To assist us with future evaluation work and feedback on your report, please provide contact details below. [NB: Contact details provided for one person in each partner NGO – the Executive Director; other staff details will be provided on request]

<b>Project Title</b>	Information incentives for CBD implementation in private reserves in Argentina and Paraguay
<b>Ref. No.</b>	162/12/011
<b>UK Leader Details</b>	
Name	Sandra Knapp
Role within Darwin Project	Project Leader
Address	
Phone	
Fax	
Email	
<b>Other UK Contact (if relevant)</b>	
Name	Maria Peña-Chocarro
Role within Darwin Project	Project Coordinator in UK
Address	
Phone	
Fax	
Email	
<b>Partner 1</b>	
Name	Alberto Yanosky
Organisation	Guyra Paraguay
Role within Darwin Project	Executive Director, ultimately responsible for project outputs
Address	
Fax	
Email	
Name	Juana de Egea
Role	Local coordinator for project in region; same address
Email	jdegea@guyra.org.py
<b>Partner 2</b>	
Name	Yan Speranza
Organisation	Fundación Moisés Bertoni
Role within Darwin Project	Executive Director, ultimately responsible for project outputs (staff member directly involved, Maria Vera, mvera@mbertoni.org.py)
Address	
Fax	
Email	
<b>Partner 3</b>	
Name	Sergio Recio
Organisation	Fundación Habitat y Desarrollo
Role within Darwin Project	Executive Director, ultimately responsible for project outputs
Address	
Fax	
Email	