

DARWIN INITIATIVE
ANNUAL REPORT 2005-2006

**Information incentives for CBD
implementation in private reserves in
Argentina and Paraguay**

Project 162/12/011

The Natural History Museum
Guyra-Paraguay
Fundación Moisés Bertoni
Fundación Habitat y Desarrollo



May 2006

Darwin Initiative Annual Report 2005-2006

1. Darwin Project Information

Project Ref. Number	162/12/011
Project Title	Information incentives for CBD implementation in private reserves in Argentina and Paraguay
Country(ies)	Argentina, Paraguay
UK Contractor	The Natural History Museum
Partner Organisation(s)	Guyra-Paraguay (Paraguay), Fundación Moisés Bertoni, Fundación Habitat y Desarrollo (Argentina)
Darwin Grant Value	£240,095.00
Start/End dates	1 October 2003 to 31 September 2006
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1 April 2005 to 31 March 2006; Report number 5
Project website	http://www.habitatydesarrollo.org.ar/Contenido.php?idContenido=45 ; http://www.guyra.org.py/darwin.htm
Author(s), date	Sandra Knapp & Maria Peña-Chocarro (NHM); Juana de Egea, Alberto Yanosky & José Cartes (Guyra); Maria Vera (FMB) Ernesto Gamboa & Hernán Maturo (FHD), 15 May 2006

2. Project Background

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.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 and many are committed to conservation in the region, 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. ecotourism, 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 Purpose and Outputs

The primary purpose of this project is to achieve enhanced biodiversity conservation across the Humid Chaco trans-boundary ecoregion of Argentina and Paraguay. Specific objectives of the project are:

- 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.

For progress in the past year (2005-2006) against the project logframe see Appendix 1.

In agreement with the Darwin Initiative secretariat, the start date for the project was moved from May/June 2003 to October 2003. Revised timetables and milestones were prepared and submitted to the secretariat and were approved. These are attached in Appendices 2 (Timetables) and 3 (Milestones).

Again, in agreement with the Secretariat, we have decided in consultation with our partners to change the method in which we undertake training, both in terms of format and audience, in order to best fit the reality of the region. We will be running more, shorter courses of 2-3 days – people in the region are not able to attend longer courses; the area is experiencing a severe drought and employers are reluctant to have employees leave for week-long courses. This means the training will be slightly different, but will have a similar impact in the region – as without the change we would be unable to do any training at all. We are targeting youth groups and local universities – where partners feel the greatest impact will be made. In this way we will be able to train more people than originally planned, and have the training better fit for purpose within the humid Chaco situation.

4. Progress

Since its launch at the residence of the British Ambassador to Paraguay in October 2003, the project has moved forward initially slowly, but more recently with increased vitality and vigour. Hiring of new staff, both locally and in the UK was undertaken through an interview process in order to ensure good, committed project participants, and new methods of working across the border between Argentina and Paraguay and within Paraguay between different NGOs needed to be set in place before rapid progress could be made. We all signed a project MoU based on the Darwin Initiative model (signed in November 2003). We have an excellent project team in place; the UK coordinator Maria Peña-Chocarro and the local Guyra and DI-funded coordinators (based at Guyra-Paraguay in Asunción) José Cartes and Juana de Egea (together with the rest of the team working at Guyra) work together well and have significantly advanced both project goals and linkages with other biodiversity initiatives in the region. The set of rigorous criteria assembled for selection of properties for inclusion in the project resulted in the final selection of 5 sites in Paraguay and 2 in Argentina. Field work has been undertaken throughout the reporting period (with the exception of the three months the DI fellows were in London), with monthly visits to properties (travel conditions permitting, during the rainy season many areas of the Humid Chaco are inaccessible, see previous reports).

We are in the process of running the newly configured training courses (see below) and are preparing manuscripts for submission to peer-reviewed journals, one of which may be a book chapter.

We have not experienced any major difficulties, although our slow start and changing conditions in the host countries have necessitated some rethinking of the timeline and milestones, all of which has been agreed throughout the course of the project with the DI secretariat.

We have defined the database structure for information handling for elements of Chaco biodiversity – we initially decided to concentrate our efforts on the production of tools for identifying birds, trees and aquatic plants; but will now focus our efforts on trees and birds. These choices were made after discussions with the property owners and local people, they felt that though aquatic plants were of interest to us as scientists, they themselves were more interested in trees and birds; trees for

proximal usefulness and birds for ecotourism purposes. In the final dataset 250 species of birds and 135 species of trees are included for field guide production. Data for all plants collected in being entered into the project collections database (as separate from the field guide generating database) which is maintained at the NHM.

Database entry and maintenance training was undertaken during visits to the region by UK staff; and all UK staff visits include a training component for the partner organisations. During this reporting period three Darwin Fellows, Juana de Egea, Maria Vera and Hernan Maturo spent 3 months in the NHM receiving training from the UK team (detailed in the 2005 HY report). Training concentrated on GIS, research skills and herbarium skills (database design, curation skills and collection management), and while the Fellows were in London they gave a Botany Department seminar at the NHM, which went extremely well and was attended by many from outside the NHM.

Three field training workshops in biodiversity monitoring have been held at the Reserva Natural Privada Tapytá (see 2005 Annual Report for context), one for park guards and the other two for local young people involved in a World Bank project to create a fern field guide. In Tapytá, a total of 14 park guards and 11 young people have been trained. A workshop/training course was held at the Universidad de Pilar (a local university in the humid Chaco region) for two days for university students and local teachers; 44 people attended the first day and 20 both days. A manual for plant identification and biodiversity issues was prepared for the course (sent by post separately).

The project was presented at the International Botanical Congress in Vienna, Austria with a poster, and SK was invited by the Darwin Initiative to give a talk at the annual Darwin Initiative seminar in February which drew on some of the lessons learned during this project. Hernán Maturo gave a seminar about the work of the project at the Universidad del Noroeste de Buenos Aires, Argentina. As part of the Conference of the Parties in Curitiba, Guyra-Paraguay organised and ran a side event (on 20 March 2006) focusing on national NGOs and CBD implementation, at which work of the project was featured. The event was well attended and there was considerable interest in the approach we are taking in this project.

Three field guides/manuals were produced during the reporting period: one folding triptych of the common birds of the humid Chaco (sent with the 2005 HY report), a guide to the ferns of Tapytá (sent with the 2005 HY report) and a manual for plant collecting techniques and biodiversity issues prepared for the Pilar training event (sent by post with this report). One manuscript for a peer-reviewed paper has been accepted as a book chapter (by Hernán Maturo & Darién Prado in an edited book entitled *La Situación Ambiental Argentina 2005*, scheduled for publication in May 2006).

Press coverage of the project has been very good in the host countries over the course of the project (see previous reports). Most press coverage was obtained during the seminar/training courses held in September 2005; the press releases resulted in a wave of media interest during the workshops: in Paraguay 3 radio interviews, 1 television show and 2 newspaper articles; and in Argentina 6 radio interviews and 5 newspaper articles about the project and its objectives and progress. Project information has also been disseminated via the websites of partners (Guyra, FHD), IABIN, BirdLife International and the Secretaría Nacional de Turismo (Paraguay). Of particular note was a television interview done on a very popular talk show in Paraguay, where all the partners were represented and we had a 20 minute slot to talk about the project and conservation in the region in general. One local press release in Pilar in November to coincide with the training event resulted in two radio interviews on local humid Chaco stations. Whilst the DI Fellows were in the NHM several members of the Embassies of both Paraguay and

Argentina visited in order to learn more about the project and the potential for further work on conservation in their countries; these visits were organised and hosted by the DI Fellows, demonstrating their future potential to be excellent networkers at a high level once they return.

For specific progress against the logframe please see Appendix 1; below we detail some of the reasons for our early lack of progress on some of our milestones.

Our progress against our agreed baseline timetable over the course of the project has been good in some areas such as publicity, collecting and database design and entry, but has slipped in others. Our initial delay in selecting properties (detailed in 2005 Annual Report) has been worthwhile in order to achieve clarity over what the eco-region is, and how to work with landowners collaboratively. The initial delay also brought to the fore some essential aspects of working collaboratively, extremely important for the forging of local partnerships we hope will result from this project after its termination. Interestingly, initial reluctance of some landowners to participate in the project has completely evaporated as the project has continued. We disseminate information about the project in the region through personal contact with landowners who are not participating, and through the media (see below) and as the project has progressed, more and more interest in the outputs and methods has been shown. This is encouraging for the future of conservation in the region.

Continued problems with the re-launch of the NHM website meant the project website at NHM has not been completed; our project website is currently held with one of the partners (FHD), but as teething problems with the NHM web implementation (considerable and still on-going) are solved we hope to be developing the NHM site further. Information about the project on the web can be accessed at the FHD website <http://www.habitatydesarrollo.org/> and on the Guyra-Paraguay website <http://www.guyra.org.py/darwin.htm>.

Because of our change to the method in which we undertake training (see above) our numbers of people trained and types of people trained have changed since the project was originally conceived. We are now running more, shorter courses of 2-3 days – and are targeting youth groups and local universities – where partners feel the greatest impact will be made. In this way we will be able to train more people than originally planned, and have the training better fit for purpose within the humid Chaco situation. By targeting the training at local students and schoolteachers we are in fact training more trainers, something we hope will have significant knock-on effects in the region post-project as partners develop activities and take the initiative further.

The ban on export of scientific specimens from Paraguay (see Annual Report 2004-2005, and HY report 2005) has meant that all of the identifications could not be done during the Fellow's stay at the NHM as planned. An initial batch of approximately 700 Paraguayan specimens was sent before the ban; these (plus all material collected in Argentina) were worked on by the DI fellows in London. In order to identify the rest of the material collected, we have worked intensively in each of the host-countries to identify the specimens, but the lack of literature resources has made this somewhat difficult. Guyra-Paraguay has been actively involved at high levels in the government in order to sort this out; they have been closely involved in changing the legislation for the Secretaria del Ambiente (SEAM) and have now received a copy of the new regulations. This will involve new applications for collecting and export permits, with somewhat unworkable regulations. We are in discussion with SEAM about how to work this and I have every confidence that this will be sorted out and the specimens will be exported before the project ends, but this means that the identification of many of them (primarily those not being used for field guide production) will have to wait until after the project ends. This will not affect the primary outputs of the project, the field guides to trees and birds, but will mean the database of all collections made

will be less complete at project end. If the ban is not lifted we will be unable to properly distribute the duplicate specimens of plants collected in Paraguay as specified; plants collected in Argentina have been distributed as planned.

Methodologies (summary): Our methodologies are the standard ones of field collection; our construction of the database generator for field guides uses standard Access database programming techniques; data entry is 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.

Training for local project staff has to date 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 has similarly largely involved standard techniques and methodologies and in the UK, has been 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.

Timetable for work to be undertaken in the reporting period (April 2006-31 September 2006 [project ends]):

Month	Activities
April 2005	<ul style="list-style-type: none"> • Collections in target properties¹ • Argentina: workshop/training course with Boy Scouts of Formosa • Illustrations for birds and trees being done by local artists • Database entry for plants and birds on-going
May 2005	<ul style="list-style-type: none"> • Illustrations finished for trees • Illustrations for birds being done by local artist • Database entry for plants and birds on-going
June 2005	<ul style="list-style-type: none"> • Illustrations completed for birds • Photographs digitised and fit for database • Data entry completed for trees • Data entry completed for birds • Paraguay: training course for schoolteachers in conjunction with Environmental Education of Guyra • Paraguay: training course with staff of national park in region
July 2005	<ul style="list-style-type: none"> • Database completed and checked for field guide generation • GIS maps completed linking land use and habitat type as defined in field guides

August 2005	<ul style="list-style-type: none"> • Field identification sheets printed • Draft manuscripts for peer-reviewed papers prepared • Priority properties for future work identified; landowners contacted and invited to final workshops
September 2005	<ul style="list-style-type: none"> • Final project workshops (one in each host country) with handing over of database and products; presentations in both Argentina and Paraguay • Plans produced for future collaborative working across the frontier • Mechanisms for informal agreements between landowners and NGOs agreed • All data and equipment handed over to host country NGOs

Notes:

1. All collections activities include the collection of images for use in the field guides. In this final reporting period, photographic collection is prioritised.

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

The review of last year's Annual Report was discussed in full with all project partners during September 2005. All felt the reviewer had misinterpreted what the project was for, and we provided a full discussion of the various points raised in our half-year report. The review did raise some important points about how the group was working together, which we have addressed in the current reporting period. This project has been quite complex and difficult due to the differing nature of the situation on either side of the border – we had not anticipated this to cause difficulties, but have had to adjust our working practices and procedures to reflect this. The lessons we have learned from this will be useful in future projects for all of us, particularly as the partners take this initiative forward into the future to develop a trans-boundary conservation plan. For further information please see the HY report for 2005.

6. Partnerships

The three project partners are in constant e-mail and telephone contact and two project visits have been undertaken in this reporting period – one in September 2005 by S. Knapp and another in March 2006 by M. Peña-Chocarro to continue training and to consolidate the on-the-ground work in private reserves. Team-building has been an essential part of these field visits, both within the project team and between the NGO participants. The training received in London by the Fellows was very important in cementing a good cross-border working relationship amongst the participants.

Contacts have been consolidated with herbaria and natural history museums in the region in order to arrange the ultimate deposition of duplicate collections in-country and to identify students who will participate in training during the course of the project. We will leave plant collections at the national herbarium in Paraguay (PY) and at the National University (FCQ) and in Argentina at the Universidad Nacional de Rosario (UNR, in the Chaco region) and the Instituto Darwinion (SI – in Buenos Aires). Duplicates of our plant collections will also be distributed to international herbaria with an interest in southern Cone botany, such as the Missouri Botanical Garden and the Jardin Botanique de la Ville de Genève (G). Labels acknowledge the support of the Darwin Initiative. We are also working with a local universities in both

Paraguay and Argentina that are within the Humid Chaco ecoregion (Universidad de Pilar in Paraguay; Universidad de Formosa in Argentina), we have run a training course in Pilar and we are pleased that there is an interest in applying science to conservation on a regional scale. The students in these universities come from all walks of life, but are all locals in the region – they are a fantastic new group we have identified during the course of the project for involvement in conservation initiatives.

Local project staff are actively involved in discussions with some 21 additional landowners, explaining the project aims and objectives and inviting them to attend future events and to consider participating in future work post-project. There is considerable interest in the project outputs, many landowners who were initially reluctant to participate are now wanting the project to have a second phase so they can become part of it!

The project, largely through the initiative of the local partners in Argentina and Paraguay, is involved in interactions with other international and local NGOs involved in the Humid Chaco. We are also continuing our dialogue with companies (such as BP and Shell) active in the region with a view to involving them in some of the project activities in the future, or with a view to leveraging additional funding for future activities building on project outputs. FHD and Guyra-Paraguay are investing time in developing in a follow-up project to raise the needed investment and give the needed continuity.

7. Impact and Sustainability

This Darwin Initiative project has had an impact in the region. In recognition of the importance of this project, the United States Geological Survey-Biological Informatics Office (USGS/BIO) has awarded to Guyra-Paraguay a project to enhance the value of biodiversity in Paraguay. This project will provide greatly enhanced access and documentation for images of Paraguayan animals and vegetation for scientists, conservationists, decision makers, journalists, educators, students and the general public worldwide. The animals and vegetation will portray elements of the Darwin-supported project. The project will allow these images to contribute toward international biodiversity initiatives, such as the Inter-American Biodiversity Information Network (IABIN). It will also provide a secure archive for such resources, build capacity, and contribute toward international biodiversity initiatives. The images will be served via the NBII Digital Image Library, thereby facilitating access for many more users. As a result of the training event in plant identification and collection techniques and the resultant manual produced, staff from the two Paraguayan institutions (led by FMB) have made a successful grant application to use these techniques and others learned while participating on this DI project in producing a field guide to the ferns of Tapytá in collaboration with young people from local communities. In addition, Guyra-Paraguay has used the preliminary results of this project to garner matching funds in order to publish a field guide of birds from wetlands country-wide, which will be of great utility during training periods, but will not be a substitute for the user-friendly field guide formats designed for use in the project. Many more landowners have shown interest in the project and its goals as the work has progressed and been disseminated, and are approaching local partners to see how best to expand the experience to be gained, especially with the production of field guides. Some nature tourism-based initiatives are already being planned as part of the sustainability of the initiative.

8. Outputs, Outcomes and Dissemination

Differences in actual outputs against those agreed.

Outputs not achieved:

- No radio interview in UK with DI Fellows – this proved impossible to arrange
- Project presented at International Botanical Congress rather than at the American Institute for Biological Sciences meetings in summer 2005.
- Slightly less training for NGO participants during the reporting year (24 versus 25 person weeks, 3 versus 5 people) – due to illness MPC was unable to travel to the region in the middle of the year, so field technique training was not undertaken with the NGO participants and MPC

Additional outputs achieved:

- Increased number of local people trained for approximately the same number of person-weeks of training (discussed above)
- Three field guides/manuals produced
- COP event organised by Guyra-Paraguay
- Seminar given at Darwin Initiative seminar in London
- Much more media coverage than we expected (see above in Progress)

Training activities in host countries.

See above in sections 3 and 4. Training activities have been radically re-assessed in consultation with the DI Secretariat; we are implementing a new scheme of shorter training courses targeted at local young people and conservation workers such as park guards, as well as landowners.

Dissemination activities in host countries.

Dissemination of project results has occurred through a variety of avenues. The COP side vent organised by Guyra-Paraguay was very effective in presenting the results and workings of the project in a CBD focused forum. Seminars given by SK over the course of the year at various academic institutions in the UK have highlighted the work of the project to academic audiences. The DI Fellows gave a well-attended departmental seminar in the NHM. Whilst the DI Fellows were in the NHM several members of the Embassies of both Paraguay and Argentina visited in order to learn more about the project and the potential for further work on conservation in their countries; these visits were organised and hosted by the DI Fellows, demonstrating their future potential to be excellent networkers at a high level once they return. Press coverage of the project has been very good in the host countries over the course of the project (see previous reports). Most press coverage was obtained during the seminar/training courses held in September 2005; the press releases resulted in a wave of media interest during the workshops: in Paraguay 3 radio interviews, 1 television show and 2 newspaper articles; and in Argentina 6 radio interviews and 5 newspaper articles about the project and its objectives and progress (copies available if necessary). Project information has also been disseminated via the websites of partners (Guyra, FHD), IABIN, BirdLife International and the Secretaría Nacional de Turismo (Paraguay). Of particular note was a television interview done on a very popular talk show in Paraguay, where all the partners were represented and we had a 20 minute slot to talk about the project and conservation in the region in general. One local press release in Pilar in November to coincide with the training event resulted in two radio interviews on local humid Chaco stations.

Table 1. Project Outputs (According to Standard Output Measures)

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
6A	Database training for local staff in Paraguay and Argentina		5	1		
6B	Person weeks of database training		4	0.5		

6A	Training in plant and habitat collection techniques in Paraguay and Argentina for partners	2	2	3
6B	Person-weeks of field work training for partners and associates	24	24	24
6A	Number of local people trained		14	100 ¹
6B	Person-weeks of training for local people		4	32 ¹
6A	Number of DI Fellows trained in UK			3
6B	Person-weeks of training in UK			36
8	Weeks spent by UK staff in host countries	8	8	7
10	Field guides/manuals produced		1	3
11A	Papers published in peer-reviewed journals			
11B	Papers submitted to peer-reviewed journals			1
12A	Number of databases established and handed over to host country	1		
12B	Number of computer databases enhanced and handed over to host country	1	1	1
13B	Plant collections (species reference collections) made and handed over to host country ²	750	2000	2240
13B	Photographic collections made and handed over to host country		800	1000
14A	Number of conferences etc. organised where work disseminated	1		
14B	Number of conferences etc. attended where work disseminated			4
15A	National press releases in host countries	2		2

15B	Local press releases in host countries				
15C	National press releases in UK		1		
17A	Dissemination networks established				
18A	National TV features in host countries			1	
19A	Number of national radio interviews in host countries			9	
19B	National radio interviews in UK				
19C	Local radio interviews in host countries			2	
S/N	National and local newspaper articles about the project in the host countries ⁴	2	2	7	
20	Estimated value of physical assets handed over to host countries				
23	Value of resources raised from other sources for project work ⁵				(BA flights for DI Fellows)

Notes:

1. Breakdown of trainees is as follows: Tapytá 11 (7 person-weeks), September training course 45 (15 person-weeks), Univ. de Pilar training course 44 (10 person-weeks).
2. Data from plant collections made during the project is being added to the "Plant diversity in Paraguay" database (on-line at www.nhm.ac.uk/cgi-bin/botany/paraguay/) as it is received; this database is live and on-line and thus data is "handed over" on a regular and on-going basis
3. For plant collections, the numbers in each year represent totals to date
4. Newspaper articles appears to have gone from the Standard Outputs, we include this here without a number.
5. In-kind contributions by all institutions will be calculated at project end.

Table 2: Publications

Type *	Detail	Publishers	Available from	Cost £
(e.g. journals, manual, CDs)	(title, author, year)	(name, city)	(e.g. contact address, website)	
Manual	<i>Manual de Técnicas de Colecta Botánica e Identificación de Plantas Comunes</i> by S. Knapp, M.-C. Peña-Chocarro, J.I de Igea J. & M.I. Vera J. (2005)	Guyra-Paraguay, Asunción, Paraguay	Guyra-Paraguay	0

Manual	<i>Taller de Colecta Botánica de Helechos</i> by M.-C. Peña-Chocarro & M.I. Vera J. (2005)	Fundación Moisés Bertoni, Asunción, Paraguay	Fundación Moisés Bertoni	0
Folding field guide	<i>Aves del Chaco Humedo</i> by R. Elsam (2005)	Guyra-Paraguay, Asunción, Paraguay	Guyra-Paraguay	0

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 (e.g. postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries (specify)			
TOTAL			

Notes:

1. Totals for expenditure include money spent at NHM and monies sent to project partners in Argentina and Paraguay.
2. Coordinator at NHM funded by Darwin Initiative project = Maria Peña-Chocarro
3. Team at Guyra-Paraguay funded by Darwin Initiative project = Juana de Egea, José Cartes, Hugo del Castillo, Oscar Rodas (see Annual Report 2004-2005, with annex of letter to NAO resulting from problems with audit).

Overspends

We had no overspends in this reporting period.

Underspends

We underspent by £ this reporting period. Most of this was underspend in the T&S budget (£), which was in part due to the postponement of the training courses. We have requested carry-forwards of the monies into the last grant period (April-October 2006) and have received approval from the DI Secretariat. Carry-forwards will be re-allocated as follows:

1. The £ underspend on salaries will be used to pay a local illustrator to produce illustrations of birds for the field guides.

2. The unspent travel funds (£) will go towards funding a series of workshops for local people in the next few months.

10. Monitoring, Evaluation and Lessons

We have monitored the project through regular communication – the most effective way to keep on top of activities on the ground and to coordinate our activities in this final phase of project work. Our outputs are undertaken jointly, thus ensuring their fit for purpose, and subsequent to the last annual report we have put in place closer monitoring of outputs in-country, with the effects of, for example, publicity about the project being examined. These efforts however, can take time away from the actual interactive work on the project – whose results will be our primary aim. Our indicators of achievements are 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 prepare monthly reports of field activities and present some of these on the project website (<http://www.habitatydesarrollo.org.ar/>). These reports are closely monitored by the London team, and during the London training of the DI Fellows further consolidation was undertaken and lessons evaluated.

11. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum)

■ I agree for ECTF and the Darwin Secretariat to publish the content of this section

Significant achievements during include the valuable and profitable training period spent by three Darwin Fellows (Hernán Maturo, Juana de Egea and María Vera) at the Natural History Museum over the summer of 2005. While in London, the three made full use of the resources available to them and received training in research and library skills, herbarium conservation and GIS techniques. Intensive collaborative work was done on defining the database fields and in beginning to collate information for the project field guides. A major publication was drafted on the vegetation of the humid Chaco, a review that will provide a coordinated overview of the area as a whole. The Fellows experienced London and its institutions at their best, and worst (during the attacks of 7/7) and the long stay really cemented the group as a team.

Press interest in the project and its results has far exceeded our expectations – every training event or workshop held has been accompanied by extensive press coverage. This is due not only to the efforts of the publicity teams at the partner institutions, but also to widespread interest in this novel approach to conservation on private lands. People in the region are very interested in their own biodiversity, and are proud when its conservation is highlighted and studied.

The project has also attracted the interest of more than 20 additional large landowners, whose interest in future participation will certainly move forward a mechanism for the establishment of private reserves on both sides of the border in this interesting habitat.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year: 2003/2004

Project summary	Measurable Indicators	Progress and Achievements April 2003-Mar 2004	Actions required/planned for next period
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • The conservation of biological diversity, • The sustainable use of its components, and • The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose Enhance biodiversity conservation across the Humid Chaco trans-boundary ecoregion of Argentina and Paraguay</p>	<ol style="list-style-type: none"> 1. Better characterization of private reserves. 2. Availability and use of information on humid Chaco biodiversity. 3. Enhanced local biodiversity conservation capacity. 4. Conservation bodies working with private landowners to disseminate information and conserve biodiversity. 5. Local people identifying and monitoring biodiversity. 6. Steps taken to establishing trans-boundary conservation area. 	<p>(report impacts and achievements resulting from the project against purpose indicators – if any)</p>	<p>(report any lessons learned resulting from the project & highlight key actions planning for next period)</p>
<p>Outputs</p>			
<p>Inventory of private reserves in the humid Chaco region produced</p>	<p>Initial project management, data collection, production of final inventory document</p>	<p>Final selection of properties completed; satellite images used to target collecting in properties</p>	<p>Clear, unambiguous criteria necessary for property selection; weather and excessive rain can play a major part in this</p>

Database of humid Chaco biodiversity	Initial project management, data collection, database population and functionality, website	Database field structure finalised; data collection in field in all properties on-going; website established at FHD in Argentina (http://www.habitatydesarrollo.org.ar/)	Accessibility of properties is key, as is the active and enthusiastic support of involved landowners Website development, though apparently straightforward, can be complicated by institutional changes and policies
User-friendly field guide sheets from database	Field guide sheets, usability by intended audience	Guide sheet formats agreed by all project partners; initial agreement on formats; tested in training courses given in both Argentina and Paraguay	Care must be taken to ensure all participants are actively involved in the final formats – and that the database is properly structured to produce the final guides
UK based training for 3 Darwin Fellows	Training in identification methods, information management and GIS	Training included writing a scientific paper and operating in a large herbarium; seminars given by Fellows at NHM; completed	Training must be tailored to the individual rather than done off-the-shelf; Fellows must not be left to make their own way in an institution.
Training courses (x2) for local people	Minimum of 20 local people trained in monitoring and assessing biodiversity	Re-assessed (see text); a total of 100 local people trained to date, but in shorter training courses than originally planned	Training needs need to be tailored to regional realities – can be problematic at proposal writing stage; flexibility is critical here.
International workshop on biodiversity information	Workshop attended by appropriate stakeholders and recommendations on next steps	Not undertaken this reporting period	
Intersectoral and transboundary information exchange mechanism	Contact points, information exchange, cooperation MoUs	Contact points in place; mechanism beginning to be set up; MOUs in discussion with DI Secretariat for changing	Legal framework differs so radically in Paraguay and Argentina that MOUs are unrealistic; informal agreements can be as effective in achieving conservation outcomes.

Appendix 2. Revised Timetable

Highlighted activities are those revised in consultation with the DI Secretariat

Financial year 1: Oct 2003-Apr 2004	
November 2003	Inventory of properties in the target region completed (P).
December 2003	Background report on private reserve inventory prepared and disseminated (P).
December 2003	Project website established and accessible to all participants (IP).
January 2004	Database designed for project use (IP); preliminary training in database use for all participants (T).
February 2004	Properties for project participation identified and landowners invited to participate (F, P).
February 2004	Planning workshop for all project participants completed (W); protocols for data collection agreed and disseminated (IP)
Mar 2004	Baseline habitat surveys completed (P, IP)
Financial year 2: Apr 2004-Mar 2005	
May 2004	Data collection begun in all target properties (F)
June 2004	Data presentation in database and on website corrected and modified for fit for purpose (IP)
Nov 2004	Darwin fellows for training in UK selected (T).
Nov 2004	Field guide formats finalized (IP)
Mar 2005	Data collection throughout the year (F)
Financial year 3: Apr 2005-Mar 2006	
Mar 2005	Collections from project identified and in good management state (F)
Apr 2005	Data collection in target properties expanded (F)
May 2005	Field testing of preliminary field guides from database completed (IP, F).
June 2005	Darwin Fellows to UK for three months training in IT, GIS and collections management (T)

July 2005	Illustrations for field guides assembled and gaps identified (IP).
July 2005	Modifications to field guide format implemented (IP).
July 2005	Data collection throughout the year on all properties(F).
Sep 2005	Preliminary field guides produced and disseminated (IP)
Sept 2005	1 st training course for local people (T)
Nov 2005	Field guide formats from database finalized (IP).
Dec 2005	Potential properties for future participation identified (P).
Mar 2006	2 nd training course for local people (T)
Apr 2006	Project website modified and made live to Internet (IP).
Financial year 4: Apr 2006-Sep 2006	
May 2006	Mechanism for future cooperation of partners established and set in motion (IP).
June 2006	Illustrations for field guides completed (IP).
June 2006	Data entry complete; database finalized (IP).
June 2006	Data collection throughout the year (F).
July 2006	Drafts of peer-reviewed papers prepared (IP)
Aug 2006	Final international workshop (W).
Aug 2006	MOUs signed between landowners and conservation NGOs.
Sep 2006	Final Report submitted to national authorities and to Darwin.

Appendix 3. Project Milestones

Financial Year	Standard Output #	Description
FY 1: Oct 2003-Apr 2004		
Oct 2003	15A	1 national press release in each host country (2 press releases)
Nov 2003	12A	Private reserve inventory (to be done in database form)
Dec 2003	17A	Project website established
Feb 2004	14A	1 st project workshop (attended by all participants – ca. 25 people)
Feb 2004	6A	Training in field techniques and identification for NGO staff participating in project (approx. 5 weeks x 5 people)
	6B	25 people weeks of training (host country staff)
Apr 2004	15A	1 national press release in each host country (2 press releases)
Apr 2004	15C	1 national press release in UK (1 press release)
FY2: May 2004-Apr 2005		
Sep 2004	6A	Training in database entry and maintenance (10 people)
	6B	5 people weeks of training
Oct 2004	6A	Training in field techniques and identification for NGO staff participating in project (approximately 5 weeks x 5 people)
	6B	25 people weeks of training (host country staff)
Nov 2004	19A	1 radio interview in each host country (2 interviews)
Jan 2005	15A	1 national press release in each host country (2 press releases)
Feb 2005	6A	Training course in identification and monitoring of biodiversity for local people (20 people x 10 days)
	6B	29 people weeks of training for local people
FY 3: May 2005-		

Apr 2006		
May 2005	6A	UK-based training in GIS, database design and specimen identification and collections management (3 DI fellows x 3 months)
May 2005	6B	36 people weeks of training in NHM
June 2005	19B	1 radio interview in UK (with DI fellows and NHM staff)
Aug 2005	14B	AIBS meeting attended and project presented
Oct 2005	15A	1 national press release in each host country (2 press releases)
Oct 2005	6A	2 nd training course in identification and monitoring of biodiversity for local people (20 people x 10 days)
	6B	29 people weeks of training for local people
Mar 2006	6A	Training in field techniques and identification for NGO staff participating in project (approximately 5 weeks x 5 people)
	6B	25 people weeks of training (host country staff)
FY 4: May 2006- Sep 2006		
May 2006	17A	Dissemination network for NGOs and landowners established and working
June 2006	12B	"Plant diversity in Paraguay" (output of DI 162/04/57) database enhanced and handed over to host country (Paraguay)
July 2005	12A	Database of flagship biodiversity elements completed and handed over to host countries
July 2006	13A	Plant collections finalized and handed over the host countries (2 collections – one to each host country)
July 2006	10	Field guides finalized (2 field guides; birds, plants)
July 2006	11B	Co-authored papers to be submitted to peer-reviewed journals (2 manuscripts)
Aug 2006	17B	Landowner network to be extended with additional potential participants
Sep 2006	11A	Final international workshop to be held; attended by participants and invitees
Sep 2006	20	£3000 of equipment handed over to each participant NGO
Sep 2006	9	Action plans for transboundary conservation handed over to governments of both host countries (2 plans/reports)