# DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES

# **ANNUAL REPORT**

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 2005

#### 1. Project details

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)
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Start/End dates	1 October 2003 to 31 September 2006
Reporting period (1 Apr 200x to 31 Mar 200y) and report number (1,2,3)	1 April 2004 to 31 March 2005; Report number 3
Project website	N/A
Author(s), date	Sandra Knapp & Maria Peña-Chocarro (NHM); Juana
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	(Guyra); Maria Vera (FMB); Pablo Talares, Javier
	Alvarez, Ernesto Gamboa & Hernán Maturo (FHD),
	30 May 2005

#### 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.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 transboundary 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 guality 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 (2004-2005) 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 delay the first project workshop for training local people scheduled for Feb 2005 (see Appendix 2) until September 2005. This allowed us to all be together in London during the Fellows' training to more carefully formulate the plans and goals for this activity.

#### 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 has resulted in the final selection of 5 sites in Paraguay and 2 in Argentina. Field work has been undertaken throughout the reporting period, with monthly visits to properties (travel conditions permitting, during the rainy season many areas of the Humid Chaco are inaccessible).

We have experienced few major difficulties (but see next paragraph), although our slow start has necessitated some rethinking of the timeline and milestones. One logistical difficulty we had not planned for carefully enough was (and will continue to be) the inaccessibility of at least some of our target properties. Rains in the Humid Chaco are unpredictable, and the lack of maintenance of roads means that access is not always possible. Unfortunately the rains coincide with the peak time for flowering of trees (but fortunately not of aquatic plants!). Flooding can be a problem, and has had some impact on field work (but not much) and thus follow-on impacts on some training outputs (fieldwork training).

We have had considerable problems obtaining export permits to send plant material collected in Paraguay to the NHM in London. We have the necessary collecting permits, but the Ministry is not issuing export permits, nor have they been for some time. This began with an export ban on CITES listed species, but when the new Minister took office last year, he decided to extend the ban to all species until the law

(Ley de Vida Silvestre 96/92) was approved. This has still not gone through congress, and until that happens, all export of wildlife is prohibited. We have been attempting to solve this problem, but the staff of Guyra Paraguay feel it may necessitate some changes in Paraguayan legislation that they are willing to lead on bringing to the attention of those responsible in-country.

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 current dataset we have identified 200 species of birds and 100 species of trees for detailed treatment. This is not to say we will not gather information on other biodiversity elements, but that the intensive image gathering will be concentrated in these groups (we will also continue to collect images of aquatic plants with an eye to a field guide as an additional product from the project). This focus will significantly improve the outcomes and products from the project.

Database entry and maintenance training was undertaken during visits by UK staff; simple construction of databases was covered as was the importance of standardization of data fields and the avoidance of errors (i.e. constant and frequent checking). Basic Access database construction was covered, and the NGO staff are now using Access instead of Excel for databasing. Six people were trained for 4-5 days each, totalling 24-30 people days of training.

With leadership from FMB and project partners, 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 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 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. An FMB partner and one of the head biologists at Tapytá, though an ornithologist, was so motivated through participation in the workshop that she prepared a project for a fern guide for Tapytá that was recently approved for funding by the World Bank.

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

Our progress against our agreed baseline timetable has been good in some areas such as publicity and collecting, but has slipped in others. We have narrowed the definition of the Humid Chaco to a modification of that used by Dinerstein et al. (Dinerstein, E., Olson, D.M., Graham, D.J., Webser, A.L., Pimm, S.A., Bookbinder, M.P. & Ledec, G. 1995. *Una evaluación del estado de conservación de las ecoregionas terrestres de America Latina y el Caribe*. WWF/World Bank, Washington DC. 135 pp.), thus making clear the scope and applicability of the work we will do under this project. We are using the definition developed by TNC (The Nature Conservancy) as part of their ecoregional planning initiative for the Gran Chaco

Americano. This was developed from the original Dinerstein definition, and represents a fine-tuning due to the change in scale (one ecoregion as opposed to all LAC ecoregions). The work of the Darwin Initiative project has greatly enriched the host partners' participation in the TNC ecoregional planning process, and vice versa. This narrowing of the ecoregional definition has focused the project better and will ensure a more repeatable final product – the delay has been worthwhile in order to achieve clarity. 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.

We also feel it is worth stressing that considerable time and effort were spent visiting potential sites and meeting with landowners during the initial stages of the project. Often we found great sites (with well preserved habitats) where the owners were not interested, and in other cases, landowners with a lot of interest but whose properties were very degraded. Thus a large part of the initial delay in site selection stemmed from the careful selection of sites, such that the project sites really are those with the highest probability of meeting the project objectives on all fronts.

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) are solved we will be developing the NHM site further. Information about the project on the web can be accessed at http://www.habitatydesarrollo.org/.

We held a press event in London in association with the Trade Mission from the Paraguayan Chamber of Commerce to highlight collaborative work in the humid Chaco and corporate social responsibility. The event was supported by the Argentine Embassy, and was attended by Argentine politicians, diplomats and businessmen. The event resulted in 2 newspaper articles (see Appendix 5) and several radio interviews. Several members of the Embassies of both Paraguay and Argentina have visited the NHM to learn more about the project and the potential for further work on conservation in their countries. We did not undertake the planned press releases and interviews in the host countries, this will be done during the workshops in September when SK will be in both host countries.

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 will be tested in the first workshop to be held in September. While in Paraguay, the NHM team 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, which ultimately links to IABIN.

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.

Timetable for work to be undertaken in the reporting period (April 2005-October 2005):

Month	Activities
April 2005	<ul> <li>On-going collection<sup>1</sup> of plants and data about birds in</li> </ul>
	target properties
	<ul> <li>Production of labels for all plants collected in previous</li> </ul>
	field trips
	<ul> <li>2 field trips per month for plant collecting during the</li> </ul>
	peak flowering season
	<ul> <li>Mapping collecting localities on an on-going basis</li> </ul>
May 2005	<ul> <li>On-going collection of plants and data about birds in target properties</li> </ul>
	<ul> <li>Production of labels for all plants collected in previous field trips</li> </ul>
	<ul> <li>DI Fellows to London for training at NHM</li> </ul>
	<ul> <li>Data entry to field guide generator begun</li> </ul>
June 2005	Training of DI Fellows in London
	<ul> <li>Production of labels for all plants collected in previous</li> </ul>
	field trips
	Field work with bird
	Image preparation for field guide use
	Participation (Guyra) in the PoW/PAs under the CBD in
	Montecatini, Italy
July 2005	GIS training for DI Fellows
	Production of labels for all plants collected in previous
	field trips
	<ul> <li>Specimen preparation and duplicate distribution</li> </ul>
	<ul> <li>DI Fellows return to host countries mid-month</li> </ul>
	<ul> <li>In-country preparation for workshops to begin</li> </ul>
	<ul> <li>On-going collection of plants and data about birds in target properties</li> </ul>
	Evaluation of results from Montecatini Ad Hoc Open-
	ended Expert meeting and its impacts on the private
	reserve scheme (undertaken by Guyra).
	• Standardised monitoring of land use change and fires in
A ( 0005	the project area of humid Chaco
August 2005	<ul> <li>On-going collection of plants and data about birds in terrest properties</li> </ul>
	target properties
	<ul> <li>Production of labels for all plants collected in previous field trips</li> </ul>
	<ul> <li>1 field trip per month for plant collecting during off-</li> </ul>
	season
	Standardised monitoring of land use change and fires in
O antamb 0005	the project area of humid Chaco
September 2005	<ul> <li>Training workshops for local people in Argentina and Paraguay</li> </ul>
	<ul> <li>UK staff to visit Humid Chaco region for field work and workshops</li> </ul>
	<ul> <li>Press releases and media contacts during workshops</li> </ul>
	<ul> <li>Training for botanists at Universidad de Pilar in plant</li> </ul>
	collection techniques (additional output)
	On-going collection of plants and data about birds in

•	target properties Production of labels for all plants collected in previous field trips
•	1 field trip per month for plant collecting during off- season
•	Standardised monitoring of land use change and fires in the project area of humid Chaco
•	Preparation for COP8 to be held in Brazil

Notes:

1. All collections activities include the collection of images for use in the field guides.

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

Comments included with the annual review 2003-2004 requested a series of clarifications, here we reproduce the question and append our answer to it:

This reviewer would like to have a clearer description of what the project means by flagship elements, groups and components and how improved knowledge on them will lead to better conservation.

By flagship elements, we meant the groups we ultimately were going to produce field guides for – these were not detailed in the proposal, but rather were arrived at in consultation with project participants, scientists, NGOs and private landowners as detailed above.

It is also not clear from the documents seen by the reviewer to what extent the data being collected, stored and disseminated by the project actually reflects needs identified by stakeholders to encourage conservation on private lands. Is lack of this information a key impediment to better conservation? Is the context different between Paraguay and Argentina?

The NGO partners have identified a need for information on the organisms of the humid Chaco in order to encourage private landowners to put land into conservation; the project is designed to fill this need and to present the data in formats and ways useful to a the widest variety of people interested in biodiversity of the humid Chaco, but most importantly to enable the NGOs, who are already heavily involved in private reserve initiatives to encourage new participants in new, biodiversity-related ways. The context is very similar in Argentina and Paraguay, and the NGO partners are working together in a cross-border way. This approach, of collecting data from specific sites and then making it available in a variety of user-friendly ways, including targeted identification guides, has attracted considerable interest from landowners in other ecoregions. For instance, Guyra Paraguay is currently assisting with the development of local bird guides for private properties in both the Atlantic Forest and Cerrado ecoregions

# How much of the knowledge held by landowners and local communities will be incorporated and used? How much will they participate in information gathering? It is important that local people feel "ownership" of project products.

Local people and landowners participate in the field work and are contributing to the project through their own knowledge. We understand the importance of this element of "ownership", this is why we will be assessing field guide formats with local people during the next reporting period.

However, it would be useful to attempt to be more specific on some of the purpose indicators (e.g. how many MoUs are planned to be signed between landowners and

conservation NGOs, covering what area? How will local people monitor biodiversity? What steps will be taken to establish trans-boundary conservation areas?). We are concerned that the reviewer appears to have misinterpreted the project to a certain extent. The project is not to set up a monitoring scheme for a predefined set of reserves on private land, but to produce tools that will allow the NGO partners to develop schemes for just such monitoring in the future and to encourage future participation their already successful private reserve schemes. As part of the project we have not suggested we will have MOUs signed as an output – only that a network of landowners will be established. The conservation easement or MOU approach is highly sensitive in Paraguay at present; we feel it is important to work within local norms. We are also not establishing trans-boundary conservation areas, at the final project workshop we will develop a draft action plant that the NGO partners will take further as the political and local climate permits.

We thank the reviewer their offer to provide names and contacts for Brazilian colleagues operating similar schemes; both FHD and FMB are part of a wider South American network of NGOs working with private reserves already. We are interested however in contacting colleagues to share experiences, this potentially is a thought for future, broader collaborative work

# Baseline information is lacking in some instances in the logical framework (e.g. extent of existing collections, area of existing private reserves) but some of this should be acquired during the initial surveys.

The existing area of private reserves has been calculated from the satellite survey and the team are now in the process of identifying priority targets for expansion. Our collections made during field work are already turning up new bird and plant records for the areas in which we collect, most of which have not been visited previously.

The reviewer also pointed out that it is too early to judge on what scale landowners will adopt project outputs. We agree, but from our experiences over the past year, we find that landowners are enthusiastic and happy to participate; only post-project will we be able to accurately assess the success of this venture, which is very different to more "normal" private reserve encouragement schemes.

#### 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 October 2004 and another in February 2005 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.

Contacts have made with herbaria and natural history museums in the region in order to arrange the deposition 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 Génève (G). Labels acknowledge the support of the Darwin Initiative. We have also developed a very good relationship with the Universidad de Pilar (through the Instituto de Ciencias Ambientales) in the Paraguayan department of Ñeembucu

(within the Humid Chaco ecoregion). Students and staff of the university are interested in participating in training associated with the Darwin project and we are pleased that there is an interest in applying science to conservation on a regional scale. In this sense, this relationship – not anticipated at the initiation of the project – goes beyond partnership and has become local institutional strengthening and capacity building.

Local project staff have already begun conversations 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, tailoring them to specific users will take some time and experimentation.

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.

Guyra's relationship with TBN (TransBarge Nacional, a subsidiary of Rio Tinto) is a case in point. A project with them focusing on the biological importance of the Paraguay River, using the limits of the Humid Chaco as the limits of the study area, has just been completed. Guyra staff have been working in a partnership with TBN to gather data about biodiversity in this area, and are now looking at how to disseminate it, and will be building on institutional experience gained during this Darwin project.

FHD has initiated several activities that have directly depended upon skills developed during the course of the Darwin project; these include a workshop in the Santa Fé region (S of the project area) in order to develop guide to preserving biodiversity in the humid Chaco with rural society and another short course for forestry workers where elements of the plant collection and identification course were incorporated.

FHD and Guyra Paraguay are investing time in developing in a follow-up project to raise the needed investment and give the necessary 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 Darwinsupported 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. Several landowners have shown interest in this initiative and are approaching to our organisation 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. 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.

#### 8. Post-project follow-up activities

From our progress so far, we can see that in order to really imbed these results into the private reserve scheme we will need to develop methods for producing management plans for new private reserves that can be used in many areas, are transparent, use scientific knowledge effectively and have local buy-in. A standardised mechanism for monitoring and evaluation using the tools we will produce during the course of this project is also a priority for the future. We feel these activities may be suitable for post-project funding as they involve different skills and different teams to those developing the tools; more training and environmental education staff, for example. In order to develop generic management plan development tools, broad participation from landowners is also essential.

The local partners in this project are already involved in private reserve systems and are committed to using scientific information about biodiversity to achieve conservation goals in their countries. They are also committed to working together in the future beyond this project; this project, though complicated by having three NGO partners has been extremely successful in cementing the partnerships.

#### 9. Outputs, outcomes and dissemination

Differences in actual outputs against those in the implementation timetable and the project outputs schedule are as follows:

Outputs not, or only partly achieved:

- Website for project not established in London (see Section 4: Progress)
- Local press releases for project not released due to postponement of 1<sup>st</sup> project workshop (see Section 4: Progress).
- Due to time constraints of some of the NGO staff, only 24 person weeks of field training was given to local NGO participants during the reporting period.

Additional outputs to those initially set out:

- More time spent by UK staff in the region than anticipated (not on original timetable or outputs); 8 weeks in total.
- Slightly more database training was undertaken than planned (ca. 30 days rather than 25).
- Training and workshop on plant collection and identification techniques was given at the Tapytá Reserve at the request of park guards (see Section 4: Progress); though not planned as part of project activities, this has had a major impact in-country.
- Ongoing database updating (see <u>www.nhm.ac.uk/cgi-bin/botany/paraguay/</u>) over the Internet means project data are widely available and in a timely fashion.

• Presentation by Guyra Paraguay of the DI project and preliminary results in the Global Council of the Inter American Biodiversity Information Network (IABIN) in Panama City.

Dissemination activities in the host countries during the year have been directed at private landowners who are participating and are potential future participants, and at government ministers and departments. Participants from all three host country NGOs participate in a wide variety of international conservation events (SBSSTA, COP, IUCN Parks Congress etc.), where the project is discussed and information about it disseminated. Throughout the project period, host country institutions will continue to use the project to raise the profile of private sector participation in biodiversity conservation through targeting government officials and ministers.

An event celebrating corporate responsibility held at the Natural History Museum in London in conjunction with the Argentine Trade Mission to the United Kingdom generated a great deal of interest. The Darwin Initiative project was one of the highlighted projects for the event, both S. Knapp (NHM) and J. Alvarez (FHD) gave short presentations. We had some 30 guests from embassies, the NGO and governmental sectors, including several prominent politicians and businessmen from Argentina. A press release was prepared for the event, this resulted in 2 articles in the Argentinian media (newspaper, see Appendix 5) and several radio interviews.

We are currently planning as a project team how the project's results will be disseminated after the project has finished in 2006. It is important to recognise the pivotal role these NGOs play in the nascent IABIN (Inter-American Biodiversity Information Network) being set up and supported by the World Bank (see Section 7: Sustainability). Data from this project will form the core of this effort, and the broad societal involvement resulting from this project will be import for future dissemination of these data sharing initiatives.

Code No. Quantity Description	
6A 5 Database tra	iining for NGO staff in Paraguay and
Argentina	
6B 4 4 person-we staff	eks of database training for local partner
<b>v</b> 1	lant and habitat collection techniques
undertaken t and Jan-Feb	by NHM staff in Paraguay (Oct-Nov 2004 2005)
6B 24 Person-week	s of field work training for local partner
staff and ass	ociates
	cation and collection training given to
	ds at the Tapytá Reserve
	ks of training in plant collection and
identification	
•	t by UK staff (M. Pena-Chocarro) in host
countries	
•	lant collection and identification produced
	ed at workshop in Tapytá
	ant collections made during the project is
being added	to the "Plant diversity in Paraguay"

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

 Code No
 Output ty

 Description

		database (on-line at <u>www.nhm.ac.uk/cgi-</u> <u>bin/botany/paraguay/</u> ) as it is received; this database is live and on-line and thus data is "handed over" on a regular and on-going basis
13B	2000	Plant collections (individual numbers) made so far in
		the project; duplicates to be distributed
13B	800	Photographs of birds, trees and aquatic plants taken,
		developed and databased for inclusion in project guides
15C	1	One press release for event at NHM on corporate
		responsibility; this resulted in articles in the national
		newspapers in Argentina (Appendix 5) and radio
10.4	•	interviews of project participants for Argentine radio
19A	2	Two radio interviews resulting from NHM event

### Table 2: Publications

	loutions			
Type *	Detail	Publishers	Available from	Cost £
(e.g.	(title, author, year)	(name,	(e.g. contact	
journals, manual,		city)	address, website)	
CDs)				
None in this				
reporting				
period				

### 10. 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 <sup>1</sup>	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 = Juan de Egea, José Cartes, Oscar Rodas, Richard Elsam (see Appendix 6, extract from a letter to NAO resulting from problems with audit).
- 4. Originally we had envisaged hiring a member of staff for the database construction tasks, but found it was more cost effective to do this via consultancy; this was agreed with the DI secretariat.

#### Overspends

We had no overspends during this financial year.

#### Underspends

We have underspent by £ during the last financial period, largely due to the postponement of the travel for the DI fellows to London and the concomitant postponement of the first project workshop. The carry-forward of these funds has been approved by the DI secretariat as follows:

- 2. 1. Carry-forward of £in T&S to fund the DI Fellows' stay in London and to fund the first project workshop
  - 2. Carry-forward of £from Salaries to T&S

3. Carry-forward of £from Other for manufacture of dryers etc. in Argentina due to late delivery

4. Carry-forward of £form Postage for specimen shipping due to export permit problems (see Section 4: Progress)

5. Carry-forward of the remaining balance of T&S (£) into 2005/2006 as T&S.

During the NAO audit of the project in April, a problem with the salary receipts from Guyra was identified. The situation was explained to the NAO's satisfaction (see Appendix 6) and the personnel involved from Guyra are now detailed in the Notes to the above table.

#### 11. Monitoring, evaluation and lessons

We have monitored the project through constant communication – the most effective way to keep on top of activities on the ground. Our outputs are undertaken jointly, thus ensuring their fit for purpose, but in future we will need to 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 since the DI Fellows are currently in London, will be discussed further in order to improve communication and outputs from the project.

#### 12. Outstanding achievements during 2004-2005

We feel that our most outstanding achievement this year has been to provide the inspiration for others to seek funding to provide scientifically based conservation in the region. It may seem as if the project is going off in different directions, but we feel a real excitement beginning to develop in both the host countries, leading to a flood of ideas about post-project activities and the real development and evolution of the things we are trying to do with this project linking landowners with scientifically-based conservation in the humid Chaco. We have also found some amazingly interesting plants and animals, and have been able to talk to a wide variety of people from all sectors of society about conservation in the humid Chaco.

We cannot fail to mention the active participation and interest of landowners, particularly in Paraguay. This is an outstanding achievement due to the context of past attempts to involve private landowners in conservation. Many promises have been made to landowners over the years - through the private natures scheme and conservation initiatives - but few landowners have seen any real benefits from participation (it has mostly involved costs). As a result, as a group, private landowners are very skeptical about NGOs, conservation initiatives, etc. So the fact that we have real interest in the current initiative is an achievement and attests to the successfulness of the approach. This is especially the case with Armando Ortiz (mentioned in last year's report), who has "done the rounds" of NGOs and conservation figures, without being convinced by any of them. With this project we seem to have found a formula that he likes.

## Appendix 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
<ul> <li>in resources to achieve</li> <li>The conservation of biological</li> <li>The sustainable use of its compared to the sustainabl</li></ul>	diversity,	Kingdom to work with local partners in contribution of genetic resources	ountries rich in biodiversity but poor
<b>Purpose</b> Enhance biodiversity conservation across the Humid Chaco trans-boundary ecoregion of Argentina and Paraguay	<ol> <li>Better characterization of private reserves.</li> <li>Availability and use of information on humid Chaco biodiversity.</li> <li>Enhanced local biodiversity conservation capacity.</li> <li>Conservation bodies working with private landowners to disseminate information and conserve biodiversity.</li> <li>Local people identifying and monitoring biodiversity.</li> <li>Steps taken to establishing trans-boundary conservation area.</li> </ol>	(report impacts and achievements resulting from the project against purpose indicators – if any)	(report any lessons learned resulting from the project & highlight key actions planning for next period)
Outputs			

Inventory of private reserves in the humid Chaco region produced	Initial project management, data collection, production of final inventory document	Final selection of properties completed; satellite images used to target collecting in properties	Clear, unambiguous criteria necessary for property selection; weather and excessive rain can play a major part in this
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 in discussion between all project partners; initial agreement on formats; training course given on to park guards at Tapytá Reserve	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	Not undertaken this reporting period	
Training courses (x2) for local people	Minimum of 20 local people trained in monitoring and assessing biodiversity	Not undertaken this reporting period	
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	Not in place at this point in the project	

# Appendix 2. Revised Timetable

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 <sup>st</sup> 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 <sup>nd</sup> 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. Revised project milestones

Financial Year	Standard Output #	Description	Date achieved
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 <sup>st</sup> 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)	
		Milestone moved to Sept 2005	
		Milestone moved to Sept 2005	
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	
Sept 2005	6A	Training course in identification and monitoring of biodiversity for local people (20 people x 10 days)	
Sept 2005	6B	29 people weeks of training for local people	
Oct 2005	15A	1 national press release in each host country (2 press releases)	
Oct 2005	6A	2 <sup>nd</sup> 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	£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)	

Appendix 4. Properties participating in the project