



Submit by 21 January 2005

## DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 13 COMPETITION:STAGE 2

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Keep within word limits.

### 1. Name and address of organisation

<b>Name:</b> Eden Project	<b>Address:</b> Bodelva, Cornwall, England, PL24 2SG
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### 2. Project title (not exceeding 10 words)

A biodiversity conservation training programme for the Yabotí Biosphere Reserve
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### 3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start date:		Duration of project:			
Darwin funding requested	Total	2005/06	2006/07	2007/08	2008/09
	£ 141,130	£ 44,130	£ 46,000	£ 51,000	£ 0

### 4. Define the purpose of the project in line with the logical framework

A strategic sector of the threatened Atlantic Forest protected through a permanent programme of research, training, fieldwork, management plan and Guaraní empowerment in the Yabotí Biosphere Reserve (YBR).
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### 5. Principals in project. Please provide a one page CV for each of these named individuals

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner or co-ordinator in host country
<b>Surname</b>	Prance		Malajovich
<b>Forename (s)</b>	Professor Sir Ghillean		Mario
<b>Post held</b>	Director of Science		Coordinator
<b>Institution</b>	Eden Project		Ministry of Ecology
<b>Department</b>	Foundation		UNDP Project YBR
<b>Telephone</b>			
<b>Fax</b>			
<b>Email</b>			

**6. Has your organisation received funding under the Darwin Initiative before? If so, give details**

Project 10-006 'Propagation, nursery and establishment protocols for Seychelles endemic plants'. The project ran successfully for the duration.

**7. IF YOU ANSWERED NO TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)**

**Aims (50 words)**

**Activities (50 words)**

**Achievements (50 words)**

**8. Please list the overseas partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.**

All local partners, mostly autonomous academic institutions with a permanent strategic interest in the reserve were involved in the project development and covered the salaries of their staff and related costs. This situation will remain throughout the life of the project. **The Ministry of Ecology of Misiones (MINEC)** will also co-finance field work expenses and has agreed the project purpose and actions, to be executed mainly in the Esmeralda Provincial Park using the field-station facilities and equipment. Other partners are: **Faculty of Forest Sciences, University of Misiones (FacFor)** – FacFor will be responsible for elements of the training for the future foresters and scientists of the region. They will also conduct seed and nursery experiments. As such they are a vital institution for the project both in a practical training sense and sustained awareness raising and research. Key elements of this work will involve bamboo control. Importantly, ethnobotanist and PhD student Hector Keller is on the faculty staff. **Instituto Botanico Darwinion (DARW)** – This botanical institute will provide a botanical inventory of the region and create an accessible database for use by partners, teaching institutions and the general public. Specimens will be collated in the expansive herbarium. This work is of use to all members of the project team as well as creating a much needed database for this under-researched and under-valued biological region. **UNDP** – The UN project (also part financed by the FCO in conjunction with the British Embassy) provided the basal infrastructure which will provide key facets of the proposed Darwin Initiative project. As such communication, political bolstering and relationship building will be elements of the UNDP continued involvement, the MINEC is preparing a phase 2 to collaborate with this project. **Guaraní** – The native people of the Atlantic Forest are being squeezed into smaller home areas over time. Communities in the YBR are well engaged and it is widely understood that this project is of benefit to them and the region. As such they are hugely supportive and cooperative. Guaraní partners will be trained as forest rangers and with their un-paralleled knowledge of the forest systems will be a first point of communication with respect to work needs, ongoing poaching threat and illegal forestry.

**Ecological Investigation Laboratory Las Yungas, National University of Tucuman** – Fauna studies relating to jaguar surveying using frame-capture camera technology.

**9. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities? Please include details of any contact with the government not already provided.**

The proposed project team spent a number of days meeting with the local Guaraní people. Two villages were visited in and around the Guaraní Reserve and two villages were visited in Esmeralda Park (the largest remaining fragment of protected native forest). In all villages a warm welcome was encountered and it is widely understood that the aims of the project will help realise some of the local wishes for the forest. Faculty members from FacFor were met to discuss training programmes, their new botanic garden and ranger guide school. Meetings were held with the Minister of Ecology, the Governor and other dignitaries. This culminated in the signing of a collaborative agreement with the Governor. In Buenos Aries the National Secretary for the Environment was met. Importantly, the first meeting of the International Advisory Committee took place including Thomas Lovejoy (USA) and Mario Boza (Costa Rica). After the field station inauguration a successful awareness campaign was conducted with local students and their teachers and parents. MINEC plans to build camping facilities near the field station.

## PROJECT DETAILS

**10. Is this a new initiative or a development of existing work (funded through any source?) Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.**

The proposed project, in itself, is a new initiative. However, it aims to carry on and further develop work that was begun through a UNDP project. The outcomes of this work has provided some infrastructure with which to work and laid the foundations of solid, rounded partnerships. A key outcome has been the creation of the Marcio Ayres field station in the heart of Esmeralda Park. Here, researchers and students can investigate the surrounding forest to a level never before possible. It provides a residential base and the laboratory space necessary for thorough investigations. No similar work, that we are aware of, is being carried out in the region.

**11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.**

Through the establishment of a permanent programme of research, training, fieldwork and Guaraní empowerment in the RBY a strategic sector of the threatened Atlantic Forest the project shall support the Government's implementation of Articles 5 (8%), 7 (5%), 8 (10%), 8j (10%), 10 (5%), 12 (15%), 13 (10%), 17 (5%) and 18 (5%) of the Convention of Biological Diversity, with particular emphasis on forest biodiversity (12%), sustainable use and biodiversity (5%) and traditional knowledge, innovations and practices themes (10%).

**12. How does the work meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with National Biodiversity Strategies or Environmental Action Plans, if applicable.**

The principles and basis of the Argentinean National Biodiversity Strategy states 'it is vital to maintain an environment rich in species and ecosystems and is concerned about the loss of the values and ancient knowledge'. In a presentation of the National Environment Agenda, the Minister of Health and Environment stated that the preservation of the YBR is a high priority for the National Government and will support Misiones in this effort. Similar concepts have been endorsed by the National Secretary for the Environment and Sustainable Development in his letter of support.

**13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country.**

The YBR is located in one of the poorest areas of the country. The construction of the research facility has already generated income and State care of the region in terms of infrastructure such as electricity lines and road repairs. The proposed programme will further help the region. The empowerment and sustainable livelihood of the Guaraní people are major goals of the project. The other outputs are aimed to generate activities for biodiversity conservation in the YBR, which will generate direct earnings to the people involved and a general improvement through the new sustainable uses of the natural resources.

**14. What will be the impact of the work, and how will this be achieved? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact.**

Major impacts of the work will be a more integrally protected forest through increased cooperation between all the local stakeholders through a proficiently run project. Instead of individual groups working to their own ends, without considering the consequences of their actions (good or bad) for others, the project will integrate the disparate groups and enable everyone to see the goal of their actions. A major impact of the project will be the increased ownership felt by the Guaraní relating to 'their' forest. Some Guaraní will be trained as forest rangers and will thus be utterly involved in the protection of the land as opposed to passive observers. The scientists and conservationists working on the project will be well trained through the

conservation training programme put in place and all actions will be well disseminated.

**15. How will the work leave a lasting legacy in the host country or region?**

Major legacies will include a well trained, well organised local project team. After the completion of this particular project the institutional infrastructure and work plan will allow continuation of elements of the project work and importantly provide the framework with which to develop new important project streams. An indirect goal, but one that may provide the bones for lasting legacy, will be the engagement of some of the major conservation bodies. Some of these groups are being engaged at this stage via members of the International Advisory Committee and this could bring in much needed resources and man-power to strengthen the work initiated and implemented through this Darwin Initiative project.

The programme now has the full support of the Provincial Government, has initiated collaboration with a local university and a botanical institution in Argentina, and has set up an international advisory committee. This has given it the stability and political influence to create a sustainable programme. Further, this project is focussed on implementing all three main aspects of the CBD: conservation, sustainable use of a forest resource and a sustainable and equitable livelihood for the local Guaraní population. All UK participants are fully versed in the CBD and will do all they can to assist its implementation in Argentina. Teaching and training in both the UK and Argentina will be CBD based.

**16. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.**

The exit strategy is well-defined. It has been shown previously that related project work has crossed short-term political appointments and this will be crucial in the legacy of the project. Political and governmental relations are very good at present and throughout the duration of the project these will be retained and strengthened. This strengthening will result in fully engaged government entities which realise that the continuation of the projects activities is vital to the long term viability of the Province of Misiones economically and environmentally. Future integrated elements such as eco-tourism and improved forest protection may also prove to be important elements of this legacy.

**17. How will the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?**

At all stages and at every opportunity this work will be highlighted as a Darwin Initiative project. All literature and media exposure will mention the Darwin name and where possible the logo will be used. Importantly, the name and logo will be used on the exhibit produced at the Eden Project. This exhibit will potentially be exposed to upwards of one million annual visitors to the Eden Project and provide huge dissemination possibilities. There is also the possibility of telling the story of this Darwin Initiative project at local and national flower shows, as achieved through the collaborative, Darwin Initiative Eden and RBG, Kew exhibit at Chelsea 2004. The two visits of Prof. Prance to Misiones have received high coverage in regional press and this is likely to continue and cosponsored by the Darwin Initiative, UNDP and the national and local Governments, the results of the project will be conveyed at a meeting of the International Advisory Committee, which will attract major press coverage.

**18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?**

The project includes significant training and development elements. Training will occur on accredited courses at RBG, Kew and informally at the Eden Project. Further, *in situ* training will be delivered by experienced tropical scientists who have previously completed training elements on Eden's Seychelles Darwin project and other relevant experience. It is wholly envisaged that those trained will be able to train others. Also, the *in situ* training will, in the majority, be delivered at FacFor and thus will be incorporated into their formal studies and form part of curricula. Assessment will be through their standard University system. The training times will vary according to individuals and course and range between one week and two months.

## LOGICAL FRAMEWORK

19. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Goal:</b> 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 <ul style="list-style-type: none"> <li>• the conservation of biological diversity,</li> <li>• the sustainable use of its components, and</li> <li>• the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</li> </ul>			
<b>Purpose</b> A strategic sector of the threatened Atlantic Forest protected through a permanent programme of research, training, fieldwork, management plan and Guaraní empowerment in the Yabotí Biosphere Reserve (YBR).	Improvement in habitat and species composition knowledge. Forest restoration and bamboo control procedures A stable scientific staff stewarding a well equipped and funded field station assisting MINEC in biodiversity conservation Proposed changes adopted in FacFor graduate and rangers school curricula At least 2 Guaraní villages empowered through the partnership, and its income level raised by at least 20% Public awareness campaigns about Misiones forests in Argentina and UK One person obtains PhD as direct result of project work	Peer reviewed articles by key staff, field survey reports and inventories Field survey reports by key staff and publications by partner organisations Integration, functions and reports of the committee FacFor and school curricula reports of activities and income Reports by partner organisations  Copies and transcripts of publicity sent to Darwin  Certificate of PhD	Appropriate skills in the staff team  Continued commitment of partner organisations and regional government  Ongoing viability of partner institutions  Continued commitment of student
<b>Outputs</b> Institutional framework agreement between staff members and MINEC Funding arrangements agreed Equipping of the field station Inventory of plant species and FacFor herbarium improvement Accumulated data made available on internet through IRIS database  Ethnobotanical studies with Guaraní people, integrated to qualified roles, livelihood improvement  Techniques of restoration and bamboo control	Agreements reached, funding obtained  Equipment incorporated  Herbarium collections deposited at FacFor, DARW and RBG, Kew and database increased  Ethnobotanical knowledge of Region and sustainable livelihood plan produced.  Experimental plots installed in infested areas	Text of the agreement, balances and reports from the field station  Database, published articles sent to Darwin Initiative  Course outlines, published articles, plan document sent to Darwin Initiative Results from experimental plots evaluated  Field reports	Continued commitment of partner organisations and regional government  Appropriate production skills in staff team  Continued assistance from Guaraní population

<p>produced. Biodiversity assessment and monitoring programme in place</p> <p>Education, training and wide reaching dissemination of information. Including four courses taught in Argentina and four FacFor staff travel to Kew and Eden Project</p> <p>Management plan for YBR produced</p> <p>Exhibit produced at the Eden Project</p>	<p>Protocols established and tested</p> <p>Articles in partner publications, TV broadcasts and local media. Papers for scientific and conservation communities published</p> <p>Existence of management plan</p> <p>Exhibit presence on-site at the Eden Project</p>	<p>Copies of all publications, press coverage and recordings sent to Darwin Initiative</p> <p>Management plan sent to Darwin Initiative</p> <p>Exhibit briefs and photographs sent to Darwin Initiative</p>	<p>Appropriate skills in staff team</p> <p>Continued cooperation of project partners</p> <p>Continued cooperation of project partners</p> <p>Appropriate production skills in staff team</p>
<p><b>Activities</b></p> <p>Field research inventory program</p> <p>Restoration and bamboo control pilot programs</p> <p>Ethnobotanical studies</p> <p>Curricula modification, teaching improvement and training</p> <p>Research data and publications</p> <p>Dissemination and public awareness</p>		<p><b>Activity Milestones (Summary of Project Implementation Timetable)</b></p> <p>Y1 Plant collecting, bibliographic and herbarium revision, specimen identification - establishment of permanent study sites. Y1/2/3 Collection trips and transects, DATA entry in IRIS and GIS database. Y2 Further collecting and monitoring visits. Y3 Monitoring of plots and final identification of species present- numerical techniques analysis. Y1 Two FacFor herbarium staff members take courses in Kew Gardens.</p> <p>Y1 Classification and selection of sites. Plot of sample units for techniques evaluation. Y1/2/3 treatments and evaluation, Y3 Final evaluation and conclusions.</p> <p>Y1 Workshops and agreements with 2 Guaraní villages. Y1/2/3 Ethnobotanical studies, auxiliary rented fieldwork by Guaraní people, training of rangers by Guaraní, alternative sustainable livelihood tested.</p> <p>Y1 Botanical and ethnobotanical courses in undergraduate and graduate level at FacFor defined. Y2/3 Implementation. Courses by Eden staff to instructors and advanced students and teachers of the ranger's school. Ethnobotanical orientation. Y2 Two Argentinean staff train at RBG Kew Y3 Two Argentinean staff train at Eden Project</p> <p>Y2/3 Darwinion database on internet. Analysis of research data completed. Publications of results in scientific and conservation journals.</p> <p>Y1 Minimum of two Radio broadcasts and Eden Friends talks Y2/3 Minimum of four articles in newspapers and partner publications including Plant Talk and Eden Friends magazine Y2 Exhibit completed at Eden Project.</p>	

20. Provide a project implementation timetable that shows the key milestones in project activities.

Project implementation timetable		
Date	Financial year	Key milestones
	Apr-Mar 2005/6 Apr-Mar 2006/7 Apr-Mar 2007/8	
July 2005	Apr-Mar 2005/6	<b>Preparatory work</b> - Aerial photographic survey of YBR, interpretation of photos, preliminary entry onto GIS showing topography, old working trails, forest trails, forest cover, sites of interest and poachers access routes Exploration of Park by rangers and Guaraní, design of the main path network (for 4x4 transit) and footpaths of 40 and 60 km to allow access to all sectors of the park Open roads to allow access to the field
July/Oct 2005	Apr-Mar 2005/6	<b>DARW</b> - Plant collecting, bibliographic and herbarium revision, specimen identification - establishment of study sites
Throughout year	Apr-Mar 2005/6/7/8	Collection trips and transects, DATA entry in IRIS and GIS database
July/Oct 2006	Apr-Mar 2006/7	Further plant collecting and monitoring visits to plot.
Throughout year	Apr-Mar 2007/8	Monitoring of plots, final species identification and numerical techniques analysis
	Apr-Mar 2007/8	Publication of results in International and Argentinean journals (e.g. Darwinion)
Throughout year	Apr-Mar 2005/6	<b>FacFor</b> – Seed studies and restoration: restoration areas selected, identification of study plots, restoration methods identified, restoration and recuperation work
Oct 2005/6/7/8	Apr-Mar 2005/6/7/8	Annual evaluation of the changes occurring as a result of the work
Jan/Feb 2008	Apr-Mar 2007/8	Follow-up through monitoring, evaluation (intervening when required) and publication of results
Nov 2005/ Aug 2006	Apr-Mar 2005/6/7	Two workshops held with student Ranger school
July 2005	Apr-Mar 2005/6	Two FacFor herbarium staff train at RBG, Kew
Oct/Jan 2005/6/7/8	Apr-Mar 2005/6/7/8	<b>Eden</b> – Ongoing training programme at FacFor
Mar 2007	Apr-Mar 2006/7	Exhibit completed at Eden Project
Mar 2008	Apr-Mar 2007/8	<b>MINEC</b> – Sustainable management plan for the Parque Provincial Esmeralda produced
Oct 2007	Apr-Mar 2007/8	<b>Hector Keller</b> – Completion of PhD thesis investigating Guaraní relationships with local flora
Feb 2006	Apr-Mar 2005/6	<b>Guaraní</b> – 4 Guaraní trained and assisting in forest and fauna protection

21. Set out the project's measurable outputs using the separate list of output measures.

PROJECT OUTPUTS		
Year/Month	Standard output number (see standard output list)	Description (include numbers of people involved, publications produced, days/weeks etc.)
2008	1A	One direct and two indirect PhD thesis submission
2006	3	One Masters student gains qualification
2005 - 2008	4A & 4B	Taught courses at FacFor in each year for approximately 13 weeks per year to 30 students
2005 - 2007	6A & 6B	Two Argentineans complete eight week RBG, Kew plant conservation course (2005) and 2 x four week internships at Eden Project in years 2 and 3

2005 - 2008	8	Six weeks per year will be in the field by UK staff
2008	9	Sustainable management plan for Esmeralda Park completed
2005 - 2006	11B	At least three papers submitted to peer reviewed journals first year
2006 – 2008	11B	At least five papers submitted in years 2 and 3
2005 - 2008	12B	IRIS database enhanced through life of project and available for widespread use in host country
2006 and 2008	14A	High profile meetings of International Advisory Committee, co-sponsored by the Misiones Government
2006	14A	
2005 - 2008	14B	Two workshops on Jaguar conservation and YBR organised by project team
2005 - 2008	15A & 15B	Project results presented to a minimum of three conferences in UK and Argentina
2005 - 2008	15C & 15D	Regular local and national press releases expected
2005 - 2008	16A & 16B	Regular local and national press releases expected (minimum four)
2005 - 2008	18A	Jaguar project produces an electronic newsletter which will focus on work of YBR project
2006 - 2008	18B & 18D	Two TV programmes and one documentary anticipated in conjunction with Jaguar element
2005 - 2008	19A	As many TV programmes (national and local) will be aimed for with at least one national documentary
2005 - 2008	19B & D	National radio expected every three months A minimum of two local and national radio broadcasts are anticipated
2005 - 2008	22	At least three field plots are to be established for the purposes of field research
2005 – 2008	23	£149,000 has been raised in cash and in-kind contributions. In-kind contributions are mostly salary and office costs

## MONITORING AND EVALUATION

**22. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.**

There will be two meetings of the International Advisory Committee during the project duration. One at half-term and one upon completion. Besides obvious biodiversity and local training gains these meetings will provide the major method of evaluation. As these local and global scientists have a broad range of expertise their commentary will be welcome. Their presence will attract press attention and they will be reflective of the project achievements. Host country partners will meet regularly to assess project progress as standard practice and those with academic activities will be monitored by the usual proceedings. The conservation field activities will be evaluated by Governmental and non-Governmental institutions