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Dear Ms. Halfmann:

Please find attached the Second Annual Report, 2002/03, for our project *Biodiversity basics strengthening sustainability of the Yasuní Amazonian Rainforest, Ecuador* (DI reference number: 162/10/016).

I have attached my written response to the ECTF evaluation of the First Year Report, which I gave to William Milliken after the half-project review he conducted in early May. The need to prepare the response for the unexpected review, for which I received rather short notice, has somewhat delayed completion of the Second Annual Report, as I was committed to travel to Belize and Ecuador on 17 May.

If you have any further questions, please do not hesitate to contact me.

Sincerely,

Dr. Nancy C. Garwood NHM DI Project Leader

# Darwin Initiative for the Survival of Species Second Annual Report, 2002/2003

## 1. Darwin Project Information

Project title: Biodiversity basics strengthening sustainability of the

Yasuní Amazonian Rainforest, Ecuador

Country(ies) *Ecuador* 

Contractor The Natural History Museum

Project Reference No. 162/10/016

Grant Value *£147,227* 

Start/Finishing dates July 2001/June 2004

Reporting period April 2002-March 2003

## 2. Project Background

**Location**: Yasuní National Park (YNP) & Huaorani Ethnic Reserve (HER) is a MAB reserve in Ecuador's Amazonian Region. It is the largest tract of protected forest in Ecuador ( $> 10^6$  ha) and a region of enormous diversity. It is also the sparsely populated but traditional homeland of the Huaorani people.

**Background:** Although YNP-HER is protected, it was opened to oil development about 10 years ago. Balancing economic development with conservation and sustainable use of this hyper-diverse forest has been challenging. Many lessons were learned from the environmentally and socially disastrous development of the oil industry north of the Rio Napo since the early sixties. These lessons, and pressure from international and local indigenous groups, led to the adoption of many environmentally less damaging practices (e.g. burying pipelines and limiting colonisation) in YNP-HER. Unfortunately, these have not prevented the Huaorani people, once the fierce and independent sole occupants of this vast region, from suffering enormous cultural upheaval. To preserve their cultural heritage and increase their economic well-being, the Huaorani seek to be recognised as official guardians of their traditional territory and to establish community-based ecotourism. This is not yet feasible because, although superb naturalists, most Huaorani lack the experience and skills to communicate effectively with government officials, NGO staff, local scientists and ecotourists to accomplish these goals. In addition, there are no biodiversity training tools (e.g. identification guides) for the region that will enable communication among or training for these groups. There is also a widening biodiversity knowledge gap between the experienced elders of the community and the younger generation of Huao.

## 3. Project Objectives

**Purpose:** Facilitate conservation & sustainable use of biodiversity within Ecuador's hyper-diverse Yasuní National Park & Huaorani Ethnic Reserve (YNP-HER) & increase the ability of the Huaorani people to participate in these activities.

**Specific objectives:** Our specific objectives are a) to produce much-needed biodiversity training tools in Huao-tededo and Spanish and b) to provide practical training to the Huaorani and other Ecuadorians. This lasting legacy of experience, training, biodiversity tools, and institutional co-operation will enhance conservation and sustainable use of biodiversity, benefit the Huaorani and other Ecuadorians, and assist Ecuador in implementing the CBD (especially Articles 1, 7, 8 10, and 12).

Logical Framework: attached (Appendix)

**Modifications**: There have been no modifications to the purpose or specific objectives of the project during the reporting period.

## 4. Progress

History: The need for the Darwin Initiative project was recognized during the course of a collaborative ecology study between Dr. Garwood, the Natural History Museum (NHM), and Dr. Valencia, Director of Herbario QCA, Pontificia Universidad Católica del Ecuador (PUCE). That study, which began in January 2000, was based at PUCE's Esctación Cientifica Yasuní (ECYasuní) in YNP-HER. Through its Director, Dr. Friedemann Koester, ECYasuní has developed strong links with both local Huaorani communities and Repsol-YPF (the oil company working in the region). Further discussions identified how best a Darwin Initiative project could further conservation and sustainable development in the region and to assist the Huaorani with their goals. The proposal was prepared and submitted to the Darwin Initiative in Round 9 in November 2000. Success of the proposal was announced in March 2001. The startdate on the project was July 2001 (to allow purchase of tickets), but research activities began only in September 2001. This is the second Annual Report covering 12 months of project activity, bringing the project total to 19 months.

#### Progress against agreed baseline timetable

We have completed most activities planned for 2002/03 as proposed in the amended Timetable submitted in the First Annual Report 2001/02.

<u>Undergraduate student training</u>: Student 1 received 10 months training, completing the planned 12 months. Student 2 started one month late but completed 11 of 12 months of training. Student 3 started 1 month late and completed 6 of planned 7 months training this year. Student 4 started 3 months early and received 5 rather than 2 months training this year. We were unable to find suitable students to fill the remaining studentships that were to begin in February.

<u>Darwin Fellow</u>: The Darwin Fellow completed 12 months of training. In addition to the planned visit to the UK in the fall of 2002, we added a second visit in February-March 2003. This was to provide training that would have been received from the NHM project leader during her second visit to Ecuador, a trip that was cancelled (see below).

<u>Field trainee</u>: He completed 9 months of training, bringing the total to 12 months. He is continuing employment on other projects in Yasuní and is continuing studying for the certificate in Botany.

<u>Huaorani trainees</u>: The Huao have taken a much greater interest in participating in the project than predicted. This year alone 63 people worked with our Darwin Fellow, Field Trainee and students, completing 627 person-days, including participation in the local workshops. This far surpassed the 400 person-days predicted for a minimum of 20 people. Participation from the community of Guiyero, which has closer ties to the research station, was greater than for Dicaro.

<u>Workshops</u>: Two local workshops were held, as planned, bringing members of the two Huao communities together on neutral ground at the field station. However, the international workshop planned for January 2003 was postponed because the Director of the Research Station decided that a large international gathering would impede progress on constructing new buildings to replace those damaged by recent flooding.

<u>Training by NHM project leader</u>: Only one of the two planned visits to Ecuador was completed. The second visit was cancelled because the international workshop was cancelled. To replace lost training of the Darwin Fellow by the NHM project leader, the Darwin Fellow made a second visit to the NHM in London.

Work toward completion of tree book and other guides, database and collections, and nature trails: Photographs, short descriptions and Huao names and information on tree species were obtained throughout the year as planned. The third nature trail near the research station was initiated and the nature trails at the Huao communities expanded.

#### Research, training, and/or technical work completed:

<u>Selection Criteria and Training Methodologies</u>: Description of the selection criteria for the Darwin Fellow, student and Huao trainees and the Training Methods was given in the First Annual Report. These procedures did not change during the second year.

Results: Most of the effort this year has been on work with the Huaorani in the field, using the methods described in the First Annual Report. Over 1900 trees in more than 350 species along the three nature trails have been marked and discussed with elders of the two communities. Legends, songs and other information on each species recounted by the elders were recorded, comprising about 35 tapes. (These have been copied onto other tapes for distribution to our translators, and backed up onto CDs.) Huao names of each tree species, and the different names used for particular parts of the tree, have been doubled checked within and between communities. Over 500 specimens of trees have been collected and photographed during this period and added to the Yasuní collection database. A separate database has been created of all species discussed with the Huao: this includes the scientific and Huao names of each species, short descriptions and key characters for identification, and notes on Huao knowledge of the tree. This will form the basis of the text of the book on Common Trees of Yasuní. Format of the tree book was agreed with Simbioe: for each language edition, there will be one page of text and one page of photographs for each species. Details of all outputs appear in Table 1.

In addition to working with the Huaorani, the four students have been pursuing their individual research projects as part of their Licenciatura. These are listed below.

- 1) Alejandra Moscoso Revisión taxonónimos y distribución del género *Calyptranthes* Sw. (familia Myrtaceae) en el Ecuador.
- 2) Janeth Santiana Revisión taxonónimoa de la familia Bombacaceae para el Parque Nacional Yasuní.
- 3) Veronica Sandoya La dispersión de semillas por animales en *Virola duckei* y *Otoba glyocarpa* (Myristicaceae).

4) Cristina Rivadeneira - Impacto de las actividades\* petroleras en la ecología de semillas de las especias de arboles secundarias en La Parcela de Dinámica del Bosques en Yasuní. (\* = construcción de un carretera y un helipuerto ya abandanado hace 15 aZos)

### Difficulties encountered during year

The effects of the flooding at the research station were reported in the Half-year report and discussed with William Milliken during the half-project review. In addition, a volcanic eruption in November closed the airport in Quito and roads into the Amazon from Quito for several weeks. This delayed work at Yasuní, but work progressed on databasing and other activities in Quito. No other major difficulties were encountered during the period. Minor problems noted in the Progress section above led to changes in the schedule. The few substantial changes to plan are noted below.

#### Changes to project plan for this year, 2002/03

- 1) International Workshop: The only major change to the schedule is the postponement of the International Workshop. Dr. Koester, Director of the Research Station at Yasuni, has repeatedly declined our request to hold the Workshop at the Research Station for two reasons. First, existing buildings are in poor condition following floods last year. Second, presence of a large group would interfere with and delay construction of new buildings to replace those that are damaged. Since my last visit in August the new laboratory building has been completed and the old lab building torn down. The Darwin Project moved into the new laboratory building before Christmas. A new 4-room dormitory for long-term visitors was completed before my visit in August, and a new water treatment facility and shower building were under construction at that time. Other work is in progress and/or planned. Plans to replace the research station buildings, mostly made of plywood, have long been in place but the urgency to replace them has increased following the last year's floods.
- 2) New work space for plant research: Laboratory space was in short supply for plant research, as all plant research projects are housed in one half of the new laboratory building and animal research projects in the other half. We requested and received approval from Darwin to enclose the lower part of laboratory building to provide additional research space and to rebuild the plant dryers, which were damaged in the floods earlier in the year. This was completed in March 2003. This has increased the amount of space available for preparation of plant specimens, including drying of herbarium specimens for the Darwin project and cleaning seeds for germination studies. This is a semi-permanent work area that can be cleared rapidly if threatened by flooding. (Note that there have only been two serious floods of the station in the last five years.)
- 3) Loss of UK Design Consultant: As noted in the First Annual Report, the UK Design Consultant dropped out of the project in May 2002. This loss is being replaced in three ways. First, other NHM project participants are supplying design advice. These include Bob Press, the project's Senior Technical Advisor, who has extensive experience in producing field guides, and myself, the NHM project leader. We can draw on our own experience, as well as the extensive experience of our colleagues here at the NHM. Second, we are negotiating with Simbioe, the Ecuadorian natural history publisher interested in publishing the tree book, to produce the tree book: Simbioe has substantial design experience that will fill the technical aspects needed in producing the book in Ecuador. Third, we will be requesting that

funds originally allocated for the UK Design Consultant be used to extend the training period of the Darwin Fellow to allow him to work more closely with us at NHM and with Simbioe on the production phase of the book. (This is discussed further below.)

#### Changes to project plan for next year, 2003/04

The design of the project did not change significantly during 2002/03. However, reviewing activities for 2003/04 we propose to make the following changes. These changes are incorporated into the revised **Timetable for 2003/04**.

- 1) <u>Huao legends and songs</u>. In the course of field training with the Huaorani, we have recorded about 35 tapes of the legends, songs and other information about the trees of Yasuní. This material is an extremely valuable and unique cultural heritage. We know of no other information of this type recorded from the Huaorani. Therefore, to preserve this information and to make it more widely available, we will transcribe and translate the tapes, edit the recordings, and preserve and distribute these on CDs. Only a small proportion of the recorded information can be incorporated into the Yasuní tree book. Therefore, we would like produce a booklet with the transcribed Huao and translated Spanish text to accompany an edited version of the CD. (In April, two excellent translators from Puyo agreed to participate and have already worked on the first set of tapes.)
- 2) Extension for Darwin Fellow. We plan to extend the contract of the Darwin Fellow, Gorky Villa, from 7.5 months this year to 12 months (an extra 4.5 months). This would make up in part for the loss of the UK Design Consultant and allow the Darwin Fellow to work more closely with Simbioe on the production of the tree book. In addition, this provides additional time to supervise the transcription/translation of the tapes and preparation of the CD and booklet and supervision of students.
- 3) <u>Congreso in Ecuador.</u> We will attend the combined IV Congreso Ecuatoriano de Botánica and II Congreso de la Conservación de la Biodiversidad en los Andes y en La Amazonia, which will be held in Loja, Ecuador, 25-30 August 2003. This will allow us to disseminate information about the objectives and the preliminary results of Darwin Project within Ecuador.
- 4) Change in number of students. No well-qualified and interested students were found to fill the remaining two student trainee positions in February. The next break in the school year, when students usually begin their projects, is not until August. A start date that late would not allow students to complete their projects before the Darwin Initiative project ends. Therefore, we plan to extend the traineeships for the four existing students rather than start two new traineeships. Licenciatura projects here normally require at least two years to complete. The extensions will provide our existing four students with further support towards their Licenciatura. They would also continue to assist on other aspects of the Darwin project as they did during their initial 12 month traineeship. The extensions would be for 1-6 months, depending on the student.
- 4) Additional travel for students. We plan to fund some additional travel for two of our students to enhance their training. Janeth Santiana, who is revising the Bombacaceae for her Licenciatura project, has requested travel funds to visit the herbarium in Bogota, Colombia, where there are many type specimens. She will also be able to examine and photograph other specimens there for the project as a whole. Janeth and Alejandra Moscoso, who is revising the Ecuadorian species in a genus of Myrtaceae, have also asked to carry out a short collecting trip (about 2 weeks) outside of Yasuní in other areas of Ecuador to increase the number of specimens of these groups available for study. (As explained in partnerships below, Alejandra has obtained additional funding to visit herbaria in the United States.)

- 5) Extension for field trainee. We plan to provide a further two or three months training for the field trainee. This will allow him to participate in the collecting trip of the two students (noted above) and to erect the signage for the nature trails. In addition, we wish to provide him with a more structured period of study so that he can concentrate on studying for his certificate in Botany. Part of this time would be spent in the Herbarium in Quito.
- 6) Extension for financial assistant. Lastly, we plan to extend the contract of our part-time financial assistant from 8.5 months this year to 12 months (an extra 3.5 months). This would be helpful in managing the last stages of the project in Ecuador.

**Funding for proposed changes.** The changes noted above can be met from the existing budget by reallocating funds already awarded. Darwin approved a significant carryover of funds from 2002/03 into 2003/04 and 2004/05. In particular, salary and travel funds originally allocated to the UK Design Consultant and two unfilled studentships will be used to fund the extensions of the Darwin Fellow, students, field trainee and financial assistant and the extra travel requested.

#### Timetable for 2003/04:

Date	Output ref. no	Details		
April 03	4A & B	Undergraduate student (2 of 4) receives 1 month of training in biodiversity work [completing 12 of 12 month total - excluding extension]		
May-June 03	8	NHM project leader to Ecuador to train DF, student, field and Huaorani trainees for 3 weeks		
May 03– August 03	6A & B	Huaorani participants receive remaining training in biodiversity work in the field [about 10 individuals, for an estimated total of 80 persondays]		
June 03	14A	Local workshop to train DF, student, field and Huaorani trainees		
August 03	8	NHM project leader to Ecuador to attend Ecuadorian Botancal Congress (1 week) and to train DF, student, field and Huaorani trainees (2 weeks)		
April -August 03	10	Collection of data for tree book and other identification guides completed		
August 03	7	Educational posters for Huao and Ecuadorian schools completed		
August 03	22	Three permanent nature trails at Estación Cientifica Yasuní, Guiyero and Dicaro completed		
September 03	10	Small guides completed		
September 03	4A & B	Undergraduate student (3 of 4) receives 6 months of training in biodiversity work [completing 12 of 12 month total - excluding extension]		
September 03	10	Transcription and translation of Huao tapes		

		completed [toward completing CD and text of Huao legends and songs about trees]	
October 03	4A & B	Undergraduate students (4 of 4) receive 7 months of training in biodiversity work [completing 12 of 12 month total - excluding extension]	
Novermber 03	10	Spanish text of tree book completed [toward publication of book in 2004/05]	
January 04	10	English translation of tree book completed [toward publication of book in 2004/05]	
January 04	10	Huao translation of tree book completed [toward publication of book in 2004/05]	
March 04	5	Darwin Fellow receives 12 months training, including 1 month at NHM in UK in October [30 month total]	

#### 5. Partnerships

The partnership developed between the NHM and the PUCE, led by Dr. Garwood at NHM and Dr. Navarrete at PUCE, has remained strong,. The collaboration with the American philanthropist Ms. Margot Bass had been strengthened. Her foundation, Finding Species, is funding a technical person to database all photographs taken by her team and ours.

We are now working closely with SIMBIOE (Sociedad para la Investigación y Monitoreo de la Biodiversidad Ecuatoriana) towards publising our tree book. Simbioe is an Ecuadorian NGO that promotes conservation and monitoring of biodiversity, in part by publishing natural history books and guides. They are already contributing substantially toward the design of the book. Next year we plan to sign a formal contract to publish the book in Spanish, English and Huao-tededo.

We are also sharing information on Huao names of animals with Margaret Franzen, a PhD student at University of California, Davis, Department of Anthropology. (She is studying of the economic effects on Huao households of selling bushmeat in local markets.) A database of animal names in Huao-tededo is being compiled for eventual publication.

Lastly, one of our students, Alejandra Moscoso, has received additional funding (US \$5000) for her Licenciatura project from the Center for Tropical Forest Science (part of the Smithsonian Institution). This was a competitive award received for her proposal "Contribution to the taxonomical knowledge of the Myrtaceae, with special reference to the genus *Calyptranthes* Sw. in the Yasuní Dynamics Forest Project". This will allow her to visit important herbaria in the USA (F, NY, MO, SELVY) where most of the type collections are deposited and conduct further work in Yasuní.

#### 6. Impact and Sustainability

<u>Promotion of work</u>: Most of the effort on the project this year has been on working with the Huaorani and other trainees and collecting data for future publications, guides and educational materials. However, some promotional work has begun. T-shirts promoting the project were distributed to Huao and other participants at the local workshops this year. Two articles appeared in *Plant Cuttings*, the Department of Botany (NHM)'s electronic newsletter (see publications) and another was published

in the bulletin of Funbotánica. In addition, an announcement of the project is posted on the website of the British embassy in Ecuador (http://www.britembquito.org.ec/projects/tcs.html). Unfortunately, we have been unable to hold the first international workshop (as noted earlier), which was to have been an important meeting bringing together groups interested in the conservation of Yasuní National Park and promoting the project. However, Darwin Fellow Gorky Villa has been discussing the project informally with individuals in other Ecuadorian organisations, and international organisations with bases here in Ecuador, including FUNDACYT, Ministerio del Ambiente, UICN Sur, Wildlife Conservation Society, Missouri Botanical Garden, Birdlife International, and CECIA (Centro de Educación, Conservación e Interpretación Ambiental). As results from the project become available next year, our efforts at promoting the project will increase, including our presentations at the Ecuadorian Botanical Congress in August 2003.

Exit strategies: These were described in the original application and in the First Annual Report. They have not changed. In his ECTF report and half-project review, William Milliken raised the issue of heightened expectations of the Huao participants and whether these would continue to be met after the project ends. I have already addressed this issue in my written response to his written review and during the interview. It is worth repeating, however, that our short-term goal in working with the Huao is building the initial bridge between the elder Huao who have a great knowledge of the forest, the younger Huao who no longer know or value this knowledge, and the biologists working in the region. During the course of our work, interest in this kind of work has increased in some individuals and decreased in others. In general, the community of Dicaro is less interested than the communities of Guivero and Timpoca, which are closer to the research station and have had longer contact with individuals at the research station. Yet, several of the younger Huao at Dicaro have a high level of interest and ability. In 2003/04, discussions will be held with both communities and our partner institutions to address ways to take forward the progress made during this project.

## 7. Outputs, Outcomes and Dissemination

Table 1. Project Outputs in 2002/03 (According to Standard Output Measures)

Code No.	Quantity	Description	
4A	1 person	Undergraduate student (1 of 6) receives training in	
4B	10 months	biodiversity work [12 of 12 month total completed]	
4A	1 person	Undergraduate student (2 of 6): training delayed 1-	
4B	11 months	month, as she could not start until May [11 of 12 month total completed]	
4A	1 person	Undergraduate student (3 of 6): start delayed 1 month,	
4B	6 months	[6 of 12 month total completed]	
4A	1 person	Undergraduate student (4 of 6): started 3 months early [5 of 12 month total completed]	
4B	5 months		
4A	0	Undergraduate students (5 and 6 of 6) – no suitable students were found to start in February	
4B	0		
5	12 months	Darwin Fellow receives training, including 2 months at NHM in UK [in progress and on schedule; 18.5	

		months completed of 26 month total; one extra visit to UK was added to enhance training and balance of visit to Ecuador by PI]	
6A	1 person	Field technician receives training in biodiversity work in the field [completing 12 of 12 months total]	
6B	9 months		
6A	63 people	Huaorani participants receive training in biodiversity	
6B	627 person- days	work in the field [in progress; 627 person-days completed, bringing total to 70 participants and 692 person-days; estimates of at least 20 participants and 400-person days surpassed]	
8	4 weeks	NHM project leader to Ecuador to train Darwin Fellow, student, field technician and Huao participants [only 1 of 2 planned visits completed due to postponement of international workshop in January]	
10	-	Common Trees of Yasuní book – species list reduced to 273 (toward final 250); Huao names and short descriptions compiled for about 200 species; photographs taken of 500 collections; format of book agreed with Simbioe [work toward completion of book in 2003/04]	
12B	-	Enhancement of Yasuní collection database continued [work toward completion in 2003/04]	
13B	-	About 500 collections made this year [work toward completion in 2003/04]	
14A	2	Local workshops to train DF, students, field and Huao trainees held in August and December at research station	
14A	-	International workshop – postponed	
22	-	Additional: 2 permanent nature trails expanded at Huao communities of Dicaro and Guiyero, 1 permanent trail initiated around research station for joint workshops and future training	

**Table 2: Publications** 

Type * (e.g. journals, manual, CDs)	<b>Detail</b> (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £
Newsletter article	Yasuní Darwin Initiative Project Launched. N. Garwood. 2002 (July).	NHM, London	http://www.nhm.ac. uk/botany/cuttings/ issue8/research/ind ex.html#no1	free
	Yasuni Revisited.	NHM, London	http://www.nhm.ac.	free

Newsletter article	N. Garwood. 2003 (January).		uk/botany/cuttings/ issue9/trainingandf ieldwork/index.htm <u>l</u> #no4	
Notice	Nuevo projecto de la Estación Científica Yasuní. Anon. (Gorky Villa). 2002 (April)	Universidad Nacional de Loja, Facultad de Ciencias Agrícola, Departamento de Botánica y Ecología, Casilla "11-01- 249", Loja, Ecuador	FunBotánica. Boletin 10, p. 7	unkown (free to members)

Publications, when completed, will be disseminated within Ecuador.

## 8. Project Expenditure

Table 3: Project expenditure during the reporting period

Item	Budget	Expenditure
Salaries (Darwin Fellow, students, field technician and Huaorani trainees)	34,536.77	30,419.59
Rent, rates heating lighting etc	6,120	6,120
Office administration costs	1,000	1,877.53
Travel & subsistence	25,270.88	15,437.2
Capital items/equipment	3,000	2,723.11
Others (printing & conferences)	3,653	0
Total	73,580.65	56,577.43

We asked DI to allow us to carry over the difference between budget and expenditure (£17,003.22) over the next two financial years. [DI agreed this in writing in March 2003].

### 9. Monitoring, Evaluation and Lessons

The NHM project leader, Dr. Garwood, receives monthly summaries of activities in Yasuní from Mr. Gorky Villa, the project co-ordinator and Darwin Fellow, and communicates regularly with Dr. Hugo Navarrete, the host partner leader. These communications are through email. In addition, Dr. Garwood visited Yasuní and Quito once for on-site supervision lasting about one month, and Mr. Villa visited the NHM twice this year for at least one month. The project is also evaluated through the NHM's internal project assessment system, which is linked to staff reporting and forward job plans.

Student licenciatura thesis projects are being monitored and co-supervised by Dr. Hugo Navarrete, Director of Herbario QCA (PUCE), and Dr. Garwood (NHM). Mr. Villa will provide guidance and supervision of field work in Yasuní and aid in initial tree identification. Submission and acceptance of the thesis will be the primary measure of success for the licenciatura.

All expenditure is controlled by the NHM project leader, subject to the NHM's financial control procedures and Darwin guidelines, and monitored by the Botany Departmental Administrator. Financial transactions in Ecuador are controlled by the Darwin Fellow, under approval of the main partner at PUCE. A part-time financial administrator assists them at PUCE and submits monthly financial statements to the Botany Departmental Administrator. The full accounts are audited on a regular basis at the Natural History Museum.

## 10. Author(s) / Date

Dr. Nancy C. Garwood, NHM Project leader/ 2 June 2003

## Appendix: Logical framework

	Project summary	Measurable indicators	Means of verification	Important assumptions
Goal	Darwin Initiative Main Objective:  To assist countries rich in biodiversity but poor in resources with the conservation of biological diversity and implementation of the Biodiversity Convention	Countries assisted by DI projects to conserve biodiversity and implement CBD	DI annual reports Press cuttings	DETR funding for DI continues
Purpose	Facilitate conservation & sustainable use of biodiversity within Ecuador's hyper-diverse Yasuni National Park (YNP) & Huaorani Ethnic Reserve (HER) & increase ability of Huaorani to participate in these activities by a) producing training tools and b) providing practical training	Training tools produced  Ecuadorian and Huaorani personnel trained  Conservation & sustainable use in YNP-HER  promoted by uptake of training tools & trainees	-Government and NGO reports on conservation and sustainable development in Ecuador -Correspondence from former trainees indicating employment or training in biodiversity area in YNP-HER	-Ecuador maintains commitment to CBD and protected areas -International/national funding available for uptake of products -Government and NGO reports on biodiversity produced and available
Outputs	1) Huaorani trained locally in modern biodiversity concepts & working practices 2) Ecuadorians trained locally in traditional biodiversity concepts & knowledge, production of guides & educational material 3) Ecuadorian trained in UK on production of guides and project management 4) Multilingual identification guides produced for monitoring biodiversity, training, and community-based ecotourism 5) Multilingual biodiversity educational materials produced for Huaorani schools to link non-Huaorani teachers & concepts to traditional knowledge 6) Links among Huaorani, PUCE, Repsol-YPF & NHM strengthened and focussed on biodiversity issues	1) Huaorani receive 720 person-days in-service training & participate in workshops, 2001-2003, 2) Ecuadorians receive 107 person-months in-service local training & participate in workshops, 2001-2004, 3) Ecuadorian receives 3 months in-service training in UK, 2001-2003 4) Guides published in Spanish by August 2003, published in English & Huao by January 2004 5) Educational materials produced in Spanish by August 2003, produced in Huao by January 2004 6) Joint PUCE, NHM, Repsol-YPF and Huaorani biodiversity activities increased, in-kind or other finanacial contributions directed toward biodiversity objectives	<ul> <li>1-3 ) Interim and final project reports</li> <li>4-5 ) Guides and educational materials disseminated on schedule</li> <li>6) Annual reports of Repsol-YPF, PUCE, and NHM</li> <li>6) Oral reports from Huaorani community meetings</li> </ul>	1-3) Huaorani and Ecuadorian trainees learn techniques and cooperate with each other 4-5 ) Spanish to Huao translator(s) interested in project and willing to participate 6) PUCE & Repsol-YPF continue to support biodiversity work in YNP-HER 1, 6) Huaorani remain interested and committed to project opportunities
Activities	i) Small teams of Huaorani and Ecuadorians collect and exchange biodiversity concepts and knowledge in field, training each other (outputs 1-4) ii) International & local workshops (outputs 1-6) iii) Research and writing of identification guides and educational materials (outputs 3-4) iv) Train Ecuadorians in production of guides (outputs 2, 4) v) Presentations and workshops attended by staff and trainees from all institutions (outputs 1-2, 6).	Budget:         Salaries         £104,995           Equipment         £8,333           Travel         £40,278           Miscellaneous         £13,000           Overheads and rents         £28,229           Workshops         £7,306           TOTAL of spend         £202,141           Income to be deducted         £55,630           Amount requested from Darwin         £147,227	Interim and final project reports  PUCE & NHM accounting procedures	i, iii, iv ) Suitable Huaorani and Ecuadorian trainees can be recruited to project; trainees continue with project and keep to schedule  ii ) International workshops attract international interest  i, ii) Relationships among PUCE, Repsol-YPF and Huaorani remain strong; criminal or guerrilla activity does not escalate in Yasuní region  v ) suitable venues and audiences for presentations identified and addressed