
Frontier Nicaragua – Darwin Initiative

PROJECT REF NO 14-058

**Capacity Building for Sustainable
Management of the Nicaraguan Pacific North
Region**

April 2006



FRONTIER

Darwin Initiative Annual Report

1. Darwin Project Information

Project Ref. Number	14-058
Project Title	<i>Capacity Building for Sustainable Management of the Nicaraguan Pacific North Region (CBNPR)</i>
Country(ies)	<i>Nicaragua</i>
UK Contractor	<i>Society for Environmental Exploration (SEE) / Frontier</i>
Partner Organisation(s)	<i>MARENA (Ministry of Environment, Nicaragua), LIDER (Local ngo, co-manager of Volcan Cosigüina), SELVA (Local ngo, co-manager of Estero Padre Ramos), UNAN-LEON (University of Leon, Nicaragua)</i>
Darwin Grant Value	<i>61,061 GBP</i>
Start/End dates	<i>May 2005 – September 2006</i>
Reporting period (1 Apr 200x to 31 Mar 200y) and report number (1,2,3..)	<i>1 Apr 2005 to 31 March 2006 Report 1</i>
Project website	<i>www.frontier.ac.uk</i>
Author(s), date	<i>Paul Rubio, Natasha Calderwood, Maggie Muurmans April 2006</i>

2. Project Background

- Briefly describe the location and circumstances of the project and the problem that the project aims to address.

Nicaragua is the largest country in the Central American Isthmus and the second poorest in the western hemisphere. With more than half the population living below the World Bank poverty line, and three-quarters of the poor living in rural areas and struggling to survive on less than US \$2 a day, many have no other option but to rely heavily on natural resource use, either for direct consumption or for income generation. Balancing people's needs to make a living with their desire to preserve biodiversity is therefore a complex issue, and although Nicaragua has 76 legally declared protected areas, only seven are currently under active management, due to a chronic lack of trained personnel, funds and resources. In the Pacific region, in particular, where the population density is the highest in the country, the extraction rates of most animal and plant species are far from sustainable and will soon lead to the extinction of many species of biological and economic importance. By building the capacity of local and national institutions, stakeholders, and community members within the three protected areas of Volcán Cosigüina, Estero Padre Ramos, and Isla Juan Venado to manage and monitor resource use, the CBNPR project will therefore help to safeguard the biodiversity of the Pacific North Region and promote the development of sustainable livelihoods.

3. Project Purpose and Outputs

- State the purpose and outputs of the project. Please include your project logical framework as an appendix and report achievements and progress against it (or, if applicable, against the latest version of the logframe).

The overall project purpose is to design and implement a training programme in conservation skills and monitoring techniques to build the capacity of local and regional institutions and stakeholders to sustainably manage resources in the Pacific North region of Nicaragua.

The following outputs are expected from the project:

Specific Business and Technical Education (BTEC) courses to train local Nature Reserve Rangers and templates for future use (BTEC qualification in Conservation Management)

Training programme for local, regional and national stakeholders in patrolling, surveying, monitoring of protected areas, data collection and analysis, developing conservation and eco-tourism initiatives, budget management and grant-writing, and promoting local community awareness.

Habitat and species specific terrestrial and coastal monitoring plans, particularly concerning marine turtles, within three protected areas of Nicaragua's Pacific North region: Isla Juan Venado (2,934 ha), Estero Padre Ramos (9,157 ha), and Volcan Cosiguina (13,168 ha.)

- **Have the outputs or proposed operational plan been modified over the last year, for what reason, and have these changes been approved by the Darwin Secretariat? (Please note that any intended modifications should be discussed with the Secretariat directly rather than making suggestions in this report).**

The outputs and proposed operational plan have been modified only slightly over the past year. The Darwin Secretariat has already been informed of the slight modification detailed below and has acknowledged the modification.

The Conservation Management training programme was specifically structured as a Business Training and Education Council (BTEC) diploma course, providing a UK accredited qualification for individuals who successfully completed the 190 hour training programme. In August 2005, Edexcel, the accrediting body of the BTEC qualification, officially approved the course as an accredited qualification, confirming that there would be no problems in marking the assessments and written reports in Spanish. However, in October 2005, Edexcel informed us that they would not provide a certificate to participants whose work was not completed in English. Since our participants do not speak English, this meant that although the BTEC in Conservation Management remained accredited, participants were no longer able to receive their official qualification at the end of the course. Attempts were made to veto this decision by London staff, and a letter of objection was filed, accompanied by six phone calls of complaint. However, Edexcel refused to revoke their decision. Nevertheless, this has not compromised the quality and standard of the training programme by any means. Participant morale and attendance did not change, and the course content has been translated into both English and Spanish and compiled into documents and manuals to be used for future training programmes in other parts of Nicaragua. All requirements of the BTEC course were successfully fulfilled, and if post project funding is attained, the proposed creation of a BTEC centre in Nicaragua, will allow us to confer the BTEC diploma retroactively to all participants.

4. Progress

- **Please provide a brief history of the project to the beginning of this reporting period. (1 para)**

The first 6 months of the project were spent formulating and designing the framework and curriculum of the rigorous 190-hour capacity building and training programme. This involved holding meetings and workshops with Frontier's local and regional partners in Nicaragua in order to structure course content and project activities. Once the 'Conservation Management' programme manual had been written and translated, the twenty participants for the course were identified from each of the three protected areas of Estero Padre Ramos, Isla Juan Venado and Volcan Cosiguina. In September, two introductory capacity building workshops on sea turtle conservation and hatchery management were carried out, and formal teaching for the first course in EPR was then initiated in October. Working in conjunction with the Frontier-Nicaragua UK volunteer project, monitoring programmes of nesting sea turtles were also begun, with additional community training provided on how to record data correctly and efficiently. The following course in IJV commenced mid-November, with a focus on bird identification skills and hatchery management. In January, the success of the CBNPR project so far was showcased through a poster presentation at the Conference of Ecology in an Era of Globalisation, held in Mexico. The final training course in Volcán Cosiguina was then begun in January 2006, followed by a two-week supervision period in which the participants were given extra assistance in writing their final reports and implementing their new skills back in the reserves. Preparations were then begun for the hosting of Nicaragua's first Sea Turtle Conference in Leon, which was held on March 11th and brought together 85 attendees from around the country, including representatives from FFI, WCS, DfID, and many local and national NGO's and government institutions. The Awards Ceremony and handing out of the certificates for the training course participants was also held at this time.

- **Summarise progress over the last year against the agreed baseline timetable for the period and the logical framework (complete Annex 1). Explain differences including any slippage or additional outputs and activities.**

Completion of project activities throughout the reporting period has been excellent. All activities have been completed on schedule and on target with the logical framework. As per the baseline timetable, workshops for curriculum development were completed in Q1, course content was researched, structured, translated and finalised by September, and the BTEC course was approved by Edexcel and SEE LHQ by Q2.

The first training programme began in October as planned, the second in late November and the third in January, with the final training programme completed by the close of Q4. The training programmes were conducted in the three specified nature reserves of northern Nicaragua, though the order of reserves varied slightly from the original timetable, due to weather, nesting of sea turtles, and availability of participants. During this period, biodiversity and sea turtle monitoring work was undertaken in conjunction with the Frontier volunteer programme, the results of which are currently being compiled into the management plans that are being written for each of the three reserves.

Below please find a summary of activity milestones with the appropriate quarter of completion. All activity milestones are accounted for below and have been completed successfully. Additional outputs include organising and hosting Nicaragua's first national Sea Turtle Conference on March 11th in León as detailed in question 12 later in this report.

Training programme in Volcan Cosiguina (Q4); training programme in Estero Padre Ramos (Q3); Training Programme in Isla Juan Venado (Q3). Regional workshop to present findings (Q4);

Biodiversity and species inventory data collection and analysis (Q2-Q4). Local monitoring plans written and presented by training programme participants (Q4-VC; Q3-EPR; Q3-ISV).

- Provide an account of the project's achievements during the last year. This should include concise discussion on methodologies and approaches by the project (e.g. research, training, planning, assessment, monitoring) and their consequences and impacts as well as results. Please **summarise** content on methodologies and approaches, and, if necessary, provide more detailed information in appendices (this may include cross-references to attached publications).

Research: Biodiversity monitoring programmes were carried out in all 3 protected areas, with a main focus being placed on sea turtle conservation work. The provision of technical advice in terms of hatchery building, data collection, beach patrols and nest excavations has increased hatching success of critically endangered sea turtle species nesting on the Pacific coast beaches. Permanent terrestrial monitoring plots were also set up in order to improve standardised data collection within the areas, and to improve knowledge on existing levels of flora and fauna.

Training: The curriculum combined theoretical learning with practical fieldwork and was comprised of four distinct units titled: Biodiversity Assessment, Conservation Management Strategies, Conservation and Society, and Funding Conservation Initiatives. Although sea turtle conservation remained a focus of the training programme, the evaluations were designed to cover a spectrum of different subject areas, including the implementation of species monitoring programmes, data recording, eco-tourism and educational awareness campaigns. Many of the evaluations were interactive in nature (group work, question and answer sessions) so as to encourage the interchange of ideas between the participants and to provide a forum for the open discussion of those issues, which play a key role in the effective management of the protected areas.

Assessment: In order to monitor effectiveness, each trainee was required to keep a daily logbook (provided to them), complete a number of evaluations, conduct an oral presentation and submit a written report. All materials were marked and returned to the trainees. At the end of each training programme, trainees were asked to complete feedback forms, and any issues, concerns, and suggestions for future programmes were discussed in an open seminar. Weekly mentor meetings were also built into the training programme so that both trainees and trainers were constantly engaged in open dialogue and could freely suggest improvements to the programme. In order to monitor trainee outcomes following completion of the course, each trainee received a two-week supervision period by a member of the project team in order to provide any additional support needed to apply their new skills. Successful completion of the training programme resulted in a vocational qualification in Conservation Management.

Science training methodology: The field work component of the course focused largely on sea turtle conservation, given the importance that this has within the three protected areas. Capacity training therefore focused on hatchery building according to standardised IUCN methodology. It was also possible to provide training in the use of technical equipment such as I-buttons and temperature probes, designed to collect further data on hatching success rates. In fact, the hatcheries this season proved to be far more successful than the

previous year, with Isla Juan Venado doubling last year's nesting season hatching success rate within the first two months. Beach patrolling was also effective by demonstrating efficient hatching releasing techniques and nest relocation to the participants as well as data collection on carapace measurements and in-situ nest demarcation. Nest temperature measurements showed that temperatures were close to pivotal. However, although theoretical and practical training was provided to improve hatchery management techniques, data registration still provided inconsistent and incomplete throughout the nesting season, and therefore no conclusions can be made on the exact emergence success.

During the capacity building programme, training was also provided on more general scientific data collection in order to stimulate a greater understanding of conservation issues and tropical ecology. Activities such as bird observation and identification, mist netting, trapping butterflies and reptiles, the use of GPS and cartography added to this general concept. Bird observations were held early in the morning during which the participants would go out in groups of two to compile a bird list of the monitoring plot. The birds would be described by their individual characteristics and later identified with help from a field guide. During the course at Isla Juan Venado, a bird specialist from UNAN-Leon accompanied the group on a boat tour to identify birds inhabiting the 15km network of mangroves found there. In order to identify bat species in the area, training in the use of mist nets was provided. This order of mammals is one of the least studied groups within all 3 reserves and there is an immense lack of knowledge regarding the species. During one particularly successful night of mist netting in Estero Padre Ramos, an unregistered species of bat (*Myotis myotis*) for the area was captured and identified, therefore adding to the species inventory list that is being compiled.

Monitoring and Evaluation: In January 2006, Sarah Woodcock, Programme Officer (Research and Development, from the London Head Office spent 10 days conducting a mid-term evaluation report on the course. Interviews were held with the course participants and Frontier staff to ensure quality assurance and to monitor the project's progress so far. Both field work and class room teaching were evaluated. No further external visits (Dr. Gormely and the CBD focal point) were carried out, however, due to time restrictions.

The timetable was refined and discussed with project staff and stakeholders during the planning phase of the project. All parties concerned were openly aware of the proposed timetable and the project manager's strong desire to adhere to the timetable. Any changes to the timetable had to be approved by the project manager via the weekly situation report and weekly progress report. Project co-ordinators sent weekly updates to the project manager during course implementation to discuss any concerns and give general updates and positive news from the field (providing some inspiration to those desk bound in London!)

- **Discuss any significant difficulties encountered during the year and steps taken to overcome them.**

There were very few problems encountered during the running of the programme largely due to extensive planning, open communication, and a strong network of trust and alliance with the target beneficiaries and stakeholders.

The greatest challenge to the project was finding a method for course participants to leave their current jobs for an entire month to complete the training programme. Given the intensive nature of the training programme, it proved to be difficult for some park guards to find 190 hours free from work to enrol on the programme full-time. Most were still required to perform other duties within the protected areas and it became necessary to structure the timetable around this. In IJV, a temporary replacement park guard had to be found so that the main personnel in the protected area could still take part on the course without leaving the reserve unmanned. In other instances, the park guards could only get leave of absence for two-week periods, and therefore had to conduct the first part of the course in one area, and complete the remainder in another. This was not logistically impossible to do, but it meant that each course timetable had to follow the same structure and layout as the previous so that participants joining at a later stage would not miss or repeat specific topics or field work on the syllabus. However, it did have the added bonus of allowing the participants to spend time in different protected areas and witness at first hand how these were managed in comparison to their own.

- **Has the design of the project been enhanced over the last year, e.g. refining methods, indicators for measuring achievements, exit strategy?**

Though strong at the start, the training programme continued to improve over time as the project co-ordinators worked off feedback from course participants and held local and regional workshops to refine the course and deliver an even better training programme over time. This is one of the many reasons we wish to apply for post-project funding as the course is so successful and should be conducted throughout protected areas of Nicaragua as per the request of in-country stakeholders.

- Present a timetable (workplan) for the next reporting period.

The following timetable has a few minor changes from the original timetable, including additional outputs and activities to the original proposed timetable and has been sent to the Darwin Secretariat for approval.

April 2006	Apr-Mar 2006/7	Sea Turtle Symposium and BTEC Awards Ceremony.
May 2006	Apr-Mar 2006/7	Presentation of sea turtle monitoring work and the project at the International Sea Turtle Symposium in Greece. Participation in Latin America sea turtle strategy meetings. Management plans designed with Alliance based on habitat monitoring and training programmes. Dissemination of information within British government offices – DFID, High Commissions, etc.
May 2006	Apr-Mar 2006/7	Data collected from previous quarters collated and compiled to form recommendations and addendums to current management plans for IJV, EPR, and VC.
June 2006	Apr-Mar 2006/7	Management recommendations presented to MARENA. Meetings in Managua with government officials and Ministry. Meetings for Central America region
July 2006	Apr-Mar 2006/7	Management plans addendums translated and integrated into MARENA's national strategy and integrated into national environmental policy.
July 2006	Apr-Mar 2006/7	Sea Turtle monitoring and conservation manual translated and printed for all three reserves.
July 2006	Apr-Mar 2006/7	BTEC training manual translated
August 2006	Apr-Mar 2006/7	BTEC training manual made available on-line.
September 2006	Apr-Mar 2006/7	Submission of final report.

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

- Have you responded to issues raised in the review of your last year's annual report? Have you discussed the review with your collaborators? Briefly describe what actions have been taken as a result of recommendations from last year's review. Not Applicable

6. Partnerships

- Describe collaboration between UK and host country partner(s) over the last year. Are there difficulties or unforeseen problems or advantages of these relationships?

Frontier Nicaragua had already been working closely with all four country partners (MARENA, LIDER, SELVA and UNAN-Leon) since 2004 largely, so continued collaboration with them during the CBNPR project has not posed any difficulties. Initial workshops and meetings were held with all the organisations prior to the elaboration of the training programme so as to pin point specific areas of interest and need. Throughout the training course Frontier staff was in constant contact with the field personnel of each organisation, and progress updates to the head offices were delivered on a regular basis. At the end of each course, a meeting was held with the respective counterpart to discuss the main achievements of the project and course participants, as well as plans for future work in each reserve.

- Has the project been able to collaborate with similar projects (Darwin or other) in the host country or other regions, or establish new links with / between local or international organisations involved in biodiversity conservation?

At the inception of the project, Frontier immediately contacted the project leader for the other Darwin Initiative project in Nicaragua and met with her extensively at the University of Wales in Bangor to learn from the successes and failures of her project and to establish synergies.

Collaboration between Frontier Nicaragua and other NGO's in-country has been very successful throughout the project. Collaborative efforts to standardize data for effective sea turtle conservation has meant that strong ties were developed with all stakeholders involved in sea turtle conservation work in the country. In IJV in particular, a good working relationship with Fauna and Flora International (FFI) was established so as to coordinate conservation efforts and prevent an overlap of project activities. For although FFI has been concentrating on the conservation of the critically endangered leatherback (*Dermochelys coriacea*) and Frontier Nicaragua has focused more on the conservation of the Olive Ridley (*Lepidochelys olivacea*), collaboration was needed in order to protect the entire nesting beach and ensure the successful management of the shared species hatchery. Frontier Nicaragua was therefore invited to several workshops organised by FFI in order to join work forces and standardize data collection.

As a member of the Nicaraguan Sea Turtle Alliance, Frontier was also able to propose recommendations for the creation of national strategies for sea turtle conservation in the Pacific region. Meetings were held on a regular basis and Frontier was actively involved in helping develop national sea turtle protection management techniques. On an international level, contact was also made with The Wildlife Conservation Society, based on the Caribbean coast, and further meetings were held with the latter in order to share and promote conservation plans proposed by both organisations.

7. Impact and Sustainability

- Discuss the profile of the project within the country and what efforts have been made during the year to promote the work. What evidence is there for increasing interest and capacity for biodiversity resulting from the project? Is there a satisfactory exit strategy for the project in place?

Maintaining a high profile has been one of the project's main priorities since its conception. Meetings with 47 different stakeholders were held at the start of the reporting period to promote the project's planned activities, and since then, regular updates have been provided detailing the work carried out so far. Frontier's profile within the Northwest Pacific region has been especially significant as all the park rangers working in the 3 nature reserves there participated on the capacity building programme. Interest in conservation initiatives have also increased within local communities based in these protected areas thanks to community workshops and environmental education talks. Several lectures have been given at rural schools in order to promote environmental awareness and interest in conservation. During the first national sea turtle conference in Nicaragua, organised by Frontier, stakeholders registered nationwide. During this event, the results of the capacity building programme and the work of Frontier was presented through a poster and an oral presentation. All members of the Nicaraguan Sea Turtle Alliance were present, and it has been suggested that the conference should become an annual event in order to share information and strengthen communication between stakeholders. A strong exit strategy will be carefully implemented in the second year of the project in order to continue the project's success and legacy.

8. Post-Project Follow up Activities (max 300 words)

This section should be completed **ONLY** if your project is nearing completion (penultimate or final year) and you wish to be considered to be invited to apply for Post Project Funding. *Each year, a small number of Darwin projects will be invited to apply for funding. Selection of these projects will be based on promising project work, reviews to date, and your suggestions within this section. Further information on this scheme introduced in 2003 is available from the Darwin website.*

- From project progress so far, what follow-up activities would help to embed or consolidate the results of your project, and why, would you consider these as suitable for Darwin Post Project Funding?

Critical follow-up activities would allow a true legacy for the project. The opening of a BTEC training centre in Nicaragua will allow Nicaraguan participants to receive a British accredited vocational qualification for the 190-hour Conservation Management course designed and implemented by the Society for Environmental Exploration. Such a qualification is unprecedented in the history of Central America. Edexcel has informed us that if we actually create a BTEC training centre in Nicaragua then we will be able to confer diplomas to individuals completing the diploma in Spanish and that students who already completed the training programme could receive their diploma through retro-active credit.

Our presence in-country has also been a constant situation analysis. The need to have a course such as the Conservation Management course across Nicaragua (beyond the three pilot reserves covered under the current grant) has been repeatedly voiced by government and civil society. Three of seventy three reserves were covered under this project. Post-project funding would allow the continuation of a highly successful project through dissemination of essential knowledge throughout various protected areas of Nicaragua.

- **What evidence is there of strong commitment and capacity by host country partners to enable them to play a major role in follow-up activities?**

Training a Nicaraguan counterpart trainer was a key activity of the project. This individual was trained to a level comparable of the trainers and would successfully be able to deliver the course. The University of Leon would host the BTEC centre and would have staff permanently working in the centre. The post-project funding would allow us to truly confer the implementation of the training programme to the Nicaraguan people. The need to have a course such as the Conservation Management course across Nicaragua (beyond the three pilot reserves covered under the current grant) has been repeatedly voiced by government and civil society.

9. Outputs, Outcomes and Dissemination

- **Explain differences in actual outputs against those agreed in the initial 'Project Implementation Timetable' and the 'Project Outputs Schedule', i.e. what outputs were not or only partly achieved? Were additional outputs achieved?**

Nearly all outputs agreed for Year 1 in the Project Implementation Timetable and Project Outputs Schedule have been realized. In fact, the supervisory period and BTEC Awards ceremony originally planned for year 2 of the project have already taken place.

Training outputs: All the outputs due to be completed in this reporting period have been achieved. The filming for the informational training DVD has been carried out, however, the editing for this will not take place until later on this year.

Research outputs: As the training and field work component of the project was only finalised at the end of February, the monitoring and management plans for each reserve are in the process of being written. These will be handed in to all relevant organisations and institutions at the end of May 2006.

Dissemination outputs: Monthly progress statements and web updates have been provided throughout the year. The listed workshops have also been completed, with additional environmental awareness / conservation careers talks carried out at local schools. A presentation of the CBNPR's work was conducted by Project Coordinator, Maggie Muurmans, at the opening of the León Sea Turtle Conference, and the event was covered by reporter Irving Guerrero, who filmed the proceedings. Radio, TV and press coverage were included. It has resulted to be very difficult to conduct the radio interviews detailed in the Outputs Schedule, however. Frontier's work has been acknowledged in interviews and press statements carried out by our counterparts, but due to the time spent in the field, it was logistically complicated to arrange with local radio stations. However, this has not been detrimental to the dissemination work of the project. The organisation has a high profile within the three reserves and due to the workshops and monitoring programmes carried out, community members were aware of the purpose and development of the work being carried out.

- **Provide details of dissemination activities in the host country during the year, including information on target audiences. Will dissemination activities be continued by the host country when the project finishes, and how will this be funded and implemented?**

The most important target audiences have been those communities based within the three reserves and directly responsible for the unsustainable use of the natural resources there. Workshops were held before the start of the training courses to teach community members about hatchery management and data collection, and at the same time, explain the background and intended work of the project. During the training courses themselves, monthly statements were provided and an update detailing the progress and work achieved so far were written for the Frontier website. In February, a newsletter in Spanish designed specifically for local and regional stakeholders was produced. This included information about the Darwin Initiative, the background to the project, and a summary of the work and results achieved in each of the reserves. The sea turtle studies were also highlighted, as was the upcoming Conference. The newsletter was printed and sent to all of Frontier's contacts in Nicaragua. Further copies were distributed at the Sea Turtle Conference. It was also pdf'd and emailed to the Nicaraguan Sea Turtle Network (which includes 100 members), as well as other conservation organisations working in Central America.

Prior to the start of the Sea Turtle Conference, posters and leaflets promoting the event were posted in prominent locations around Leon, including the University and NGO head offices.

Two local TV programmes about the project were aired throughout the reporting period. The first was for Canal 51 in December, and focused on the sea turtle work being carried out in Isla Juan Venado. Footage was taken of the hatchery, and of community members carrying out data research, releasing hatchlings and patrolling the beaches. The second programme showcased the Turtle Conference, and included interviews with Frontier staff and attendees as well as the main highlights of each oral presentation. The programme was aired 6 times on Canal CDNN-23 over a two day period. A summary of the event was also broadcast by the local radio station San Cristóbal.

- Please expand and complete Table 1. **Quantify** project outputs over the last year using the coding and format from the Darwin Initiative Standard Output Measures (see website for details) and give a brief description. Please list and report on appropriate Code Nos. only. The level of detail required is specified in the Guidance notes on Output Definitions, which accompanies the List of Standard Output Measures

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

Code No.	Year 1 Total	Description
3	20	BTEC equivalent certificates in 'Conservation Management' awarded to Nicaraguan participants of training programme
4C	10	UK self-funded volunteers received on-site training on how to collect biodiversity data and carry out sea turtle monitoring plans
4D	100 weeks	Total taught training weeks provided to the 20 course participants
5	1	Enrique Sampson was hired as the counterpart trainer for the project in September 2005
6A	20	Community members received training on hatchery management and data collection in IJV and EPR
6B	120 weeks	Total training weeks provided to the course participants, including 2 weeks supervision period
7	1	1 website link constructed for project updates (workshop dates, course timetable, etc); DVD will be finished for Year 2 (as planned); BTEC training manuals will be produced in Spanish and English for Year 2
8	165	Staff weeks
9, 10, 11B, 12B, 13B	-	All research outputs will be published and distributed in Year 2 (as planned) though they are currently near completion and have been worked on extensively in Year 1
14A	5	3 local workshops (IJV, EPR, VC) organised, 1 Sea Turtle Conference and I Pacific NW Alliance meeting
14B	9	5 above mentioned events, plus poster/oral presentations at Conference of Ecology in an Era of Globalisation (April 2006, Mexico), Sea turtle biology workshop (Nov 2006), Sea Turtle Conference (March 2006, Nicaragua), Sustainable Tourism Workshop (March, Nicaragua), International Sea Turtle Symposium (April, Greece)
15A	1	Local press release released after Turtle Conference
15B	4	Progress statements posted on Frontier's website
15C	2	Updates and articles in bi-annual Frontier newsletter
16A	2	Newsletters written in Spanish and circulated in Nicaragua
16B	800	Newsletters distributed via paper copies and email in Nicaragua

16C	2000	Frontier newsletter distribution in UK
17A	1	NW Alliance established and 1 meeting hosted
18A/18C	2	TV local programmes made
19A/19C	1	Radio interview conducted (though four more were scheduled and did not take place due to requests for extortionate sums from the radio stations)
20	-	Estimated value of 7340 GBP
21	1	Pacific NW Alliance meeting in March 2006 0 BTEC Assessors 0 BTEC Outreach Programmes (This was not able to be confirmed in the original output table. Creation of the training centre and outreach programme would require post-project funding. Please see question 8.)
22	3	Permanent field plots established in IJV, EPR, VC
23	£4,917	Co-funding by SEE

- In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website Publications Database. Mark (*) all publications and other material that you have included with this report.

Table 2: Publications – All research outputs will be published and distributed in Year 2 (as planned) though they are currently near completion and have been worked on extensively in Year 1

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £
1 BTEC training manual	In progress			
1 Sea Turtle Conservation Manual	In progress			
3 Mgmt. plan addendums	In progress			
3 Biodiversity Assessments	In progress			

10. Project Expenditure

- Please expand and complete Table 3.

Table 3: Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

Item	Budget (please indicate which document you refer to if other than your project schedule)	Expenditure	Balance
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- Highlight any recently agreed changes to the budget and explain any variation in expenditure where this is +/- 10% of the budget.

11. Monitoring, Evaluation and Lessons

- Discuss methods employed to monitor and evaluate the project this year. How can you demonstrate that the outputs and outcomes of the project actually contribute to the project purpose? i.e. what are the indicators of achievements (both qualitative and quantitative) and how are you measuring these?

Weekly situation reports and progress reports were sent between the field and London headquarters. The logical framework for the project was used as a management tool; and verifiable indicators were realized for all outputs. For example, the training course participants were required to keep daily logbooks of their lessons and activities and were marked through group discussions, exams, oral and written presentations. Course participants were asked to provide feedback on the course on a weekly basis and then formalise suggestions through feedback forms and closing local workshops to improve course content and lessons.

A project evaluation was conducted by an external evaluator (Sarah Woodcock) during the Volcán Cosigüina training course in February 2006. Participants were interviewed in order to provide comments on course proceedings. Interviews showed that the participants particularly enjoyed the field work component. Comments were positive on the successful development of the training course and seen as very useful for personal and professional development.

- What lessons have you learned from this year's work, and can you build this learning into future plans?

Over the course of the year, we have seen the training programme improve with time and have reflected these lessons in the course training manual which will be published and distributed in Year 2. Gearing a vocational qualification to a wide array of stakeholders, from government officials (who usually never make it to the field) to local community members brings together groups of people who may never come together otherwise. Combining the BTEC equivalent awards ceremony with the first ever Nicaraguan Sea Turtle Symposium brought together these stakeholders yet again after the training programme had finished. This project has shown us that these groups can indeed work together successfully.

We also realized throughout our work this past year that the current management plans for the protected areas of Nicaragua need a complete overhaul and are not user or reader friendly, as 500 page compilations of various science reports. As such and due to time and budget restrictions, we are providing recommendations and addendums for current management plans during Year 2 of the project. However, post-project funding could possibly include complete revisions of management plans to actually make them true management plans.

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

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

In this section you have the chance to let us know about outstanding achievements of your project over the year that you consider worth highlighting to ECTF and the Darwin Secretariat. This could relate to achievements already mentioned in this report, on which you would like to expand further, or achievements that were in addition to the ones planned and deserve particular attention e.g. in terms of best practice. The idea is to use this section for various promotion and dissemination purposes, including e.g. publication in the Defra Annual Report, Darwin promotion material, or on the Darwin website. As we will not be able to ask projects on an individual basis for their consent to publish the content of this section, please note the above agreement clause.

On March 11, 2006, Frontier Nicaragua hosted the first ever sea turtle conference in Nicaragua. This was an additional output beyond the outputs planned in the original project proposal and logical framework.

With over 80 registrants, the conference brought together local, national, and international experts involved in sea turtle conservation work across the Central American region. Many of the attendees had travelled extensively in order to attend, and included representatives from MARENA, Fauna and Flora International, The Wildlife Conservation Society, UNAN (Leon and Managua), DFID/British Embassy, and the Interamerican Convention for the Protection and Conservation of Sea Turtles.

The Conference's main objectives were the following:

1. To allow the exchange of information regarding different sea turtle protection projects/organizations carried out during the nesting season 2005-2006 in Nicaragua;
2. To provide information on how Nicaragua can work towards joining the Inter American Convention for the Protection and Conservation of Sea Turtles;
3. To strengthen existing connections between organizations which are working towards sea turtle conservation in Nicaragua;
4. To allow networking between all interested parties in sea turtle conservation in Nicaragua.

Throughout the day, four posters were displayed on sea turtle conservation work in Nicaragua, and six oral presentations were carried out. The programme began with a presentation by Maggie Muurmans on capacity building and sustainable management of the sea turtle population of the Northwest Pacific region of Nicaragua. The presentation focused on the research results of the work of Frontier Nicaragua undertaking during the last two years. The second presentation, by Belinda Dick from the Interamerican Convention for the Protection and Conservation of Sea Turtles concentrated on data standardization and the importance for Nicaragua to join the convention as a ratified member. Information was also provided regarding a centralized database which would publish and share information from sea turtle protection programmes region wide.

Perla Torres Gago followed with a presentation of the results of the conservation efforts of Flora and Fauna International for the critically endangered leatherback. Information such as hatching success details and estimated population size was shared with the conference participants. Jose Urteaga, working as Project Coordinator for the leatherback conservation programme of FFI, subsequently presented management strategies for sea turtle conservation along the Pacific coast. Problem areas were highlighted which needed improvement as well as current threats. Walter Vaughen-Rojas followed with a presentation concentrating on the role of tropical forests in sea turtle conservation.

The last presentation of the day was held by Cynthia Laguex, from The Wildlife Conservation Society, and concentrated on sea turtle conservation efforts on the Caribbean coast of Nicaragua. Her talk explained conservation techniques used to determine population size, foraging areas and nest protection.

The conference was then closed with a ceremony for the participants of the Conservation Management course in which the BTEC certificates were handed out to each successful individual.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2005/2006

Project summary	Measurable Indicators	Progress and Achievements April 2003-Mar 2004	Actions required/planned for next period
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • The conservation of biological diversity, • The sustainable use of its components, and • The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose</p> <p>Design and implement a training programme in conservation skills and monitoring techniques to build the capacity of local and regional institutions to manage and monitor resources in the Pacific North region of Nicaragua sustainably.</p>	<p>Training programme curriculum consolidated in Q1 and 12 month training programme begins end of Q2.</p> <p>Acceptance of habitat and species monitoring plan as part of MARENA's current monitoring programme.</p>	<p>Tailor-made BTEC equivalent diplomas awarded to 20 Nicaraguan personnel from LIDER, SELVA, UNAN-Leon, and MARENA.</p> <p>Pacific NW monitoring programme integrated into MARENA's programme.</p> <p>Ten progress reports and mid-term project report compiled and submitted to ensure quality assurance.</p> <p>BTEC equivalent awards ceremony and first ever Sea Turtle Symposium hosted by Frontier Nicaragua Darwin project.</p>	<p>Completion of research outputs and publication of training manuals and continued liaison with host country partners to ensure legacy of project.</p> <p>Strong emphasis on dissemination of information including presentation of sea turtle monitoring work and the project at the International Sea Turtle Symposium in Greece, Participation in Latin America sea turtle strategy meetings (in Europe this spring), presentations of project within British government offices – DFID, High Commissions, DEFRA.</p>
<p>Outputs</p>			

<p>Specific BTEC courses to train local nature reserve rangers and templates for future use.</p>	<p>Course curriculum constructed from input of various stakeholders.</p>	<p>Workshops for curriculum development (Q1). Approval by Edexcel and SEE LHQ (Q1-2).</p> <p>Meetings with project advisors and consultants (Dr. Lorraine Gormley in Wales; Edexcel)</p> <p>Project Manager and Project Co-ordinator meet with local and regional partners in Nicaragua. Workshops held for constructing and finalising training programme curricula.</p> <p>Training programme written.</p> <p>MARENA approves training programme.</p>	<p>SEE/Frontier to apply for post-project funding to disseminate course across more protected areas and to establish a BTEC training centre in Nicaragua.</p>
<p>Training programme.</p>	<p>20 Nicaraguan personnel (from LIDER, SELVA, UNAN-Leon, MARENA) trained in appropriate context-specific conservation and data analysis skills.</p>	<p>190 hour training programme in Estero Padre Ramos completed and regional workshop to present findings (Q2-3);</p> <p>190 hour training Programme in Isla Juan Venado and regional workshop to present findings (Q3);</p> <p>190 hour training programme in Volcan Cosiguina and regional workshop to present findings (Q4);</p> <p>Logbooks from trainees. Written reports from all candidates marked. Candidates supervised in the work place to ensure lessons learned incorporated into job.</p>	<p>BTEC training manual completed and translated and hand delivered to project partners and Nicaraguan stakeholders by Project Leader and Project Co-ordinator.</p> <p>BTEC training manual made available on-line.</p>

		<p>BTEC qualifications awarded in Q4 through awards ceremony.</p> <p>Presentation at Ecology in an Era of Globalization Conference in Mexico.</p> <p>Hosting first ever Sea Turtle Symposium in Nicaragua, coupled with Regional workshop to present finding of all training programmes and lessons learnt. Initiation of Pacific NW Monitoring Alliance.</p>	
Habitat and species specific terrestrial and coastal monitoring plan (Estero Padre Ramos)	Presentation of monitoring plan to head of SELVA and MARENA. Mgmt. plan devised.	<p>Biodiversity and species inventory data collection and analysis for Estero Padre Ramos (Q2-Q3). Local monitoring plans written and presented by training programme participants (Q3).</p> <p>Compile management plan recommendations and addendums.</p> <p>Local workshop to discuss results of training programme and lessons for monitoring programme.</p>	<p>Data collected from previous quarters collated and compiled to form recommendations and addendums to current management plans for IJV, EPR, and VC.</p> <p>Management recommendations and addendums presented to SELVA and MARENA.</p> <p>Management plans addendums translated and integrated into MARENA's current management plans.</p> <p>Sea Turtle monitoring and conservation manual translated and printed for all three reserves.</p>
Habitat and species specific terrestrial and coastal monitoring plan (Isla Juan Venado)	Presentation of monitoring plan to head of UNAN-Leon and MARENA. Mgmt. plan devised.	Biodiversity and species inventory data collection and analysis for Isla Juan Venado. Local monitoring plans written and presented by training programme participants (Q3).	Data collected from previous quarters collated and compiled to form recommendations and addendums to current management plans for IJV, EPR, and VC.

		<p>Compile management plan recommendations and addendums.</p> <p>Local workshop to discuss results of training programme and lessons for monitoring programme.</p>	<p>Management recommendations and addendums presented to MARENA.</p> <p>Management plans addendums translated and integrated into MARENAs current management plans.</p> <p>Sea Turtle monitoring and conservation manual translated and printed for all three reserves.</p>
Habitat and species specific terrestrial and coastal monitoring plan (Volcan Cosiguina)	Presentation of monitoring plan to head of LIDER and MARENA. Mgmt. plan devised.	<p>Biodiversity and species inventory data collection and analysis for Volcan Cosiguina. Local monitoring plans written and presented by training programme participants (Q4).</p> <p>Compile management plan recommendations and addendums.</p> <p>Local workshop to discuss results of training programme and lessons for monitoring programme.</p>	<p>Data collected from previous quarters collated and compiled to form recommendations and addendums to current management plans for IJV, EPR, and VC.</p> <p>Management recommendations and addendums presented to LIDER and MARENA.</p> <p>Management plans addendums translated and integrated into MARENAs national strategy and integrated into national environmental policy.</p> <p>Sea Turtle monitoring and conservation manual translated and printed for all three reserves.</p>

Note: Please do NOT expand rows to include activities since their completion and outcomes should be reported under the column on progress and achievements at output and purpose levels