

### ***Darwin Initiative Annual Report***

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Project Title	Participatory Implementation of a Management Plan, Maderas Volcano Natural Reserve, Nicaragua
Country(ies)	Nicaragua
UK Contract Holder Institution	Fauna & Flora International
UK Partner Institution(s)	n/a
Host country Partner Institution(s)	Nicaragua Ministry of Environment and Natural Resources (MARENA) NGO Fundacion entre Volcanes (FEV) Carlos Diaz Cooperative National Institute of Tourism (INTUR) Union de Guías de Ometepe (UGO)
Darwin Grant Value	£98,450 over 3 years
Start/End dates of Project	April 2006 – April 2009
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Project website	<a href="http://www.fauna-flora.org/ometepe.php">http://www.fauna-flora.org/ometepe.php</a>
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## 1. Project Background

At 276km<sup>2</sup> Ometepe is one of the world's largest freshwater islands. Situated in Lake Nicaragua, the island is comprised of two volcanoes, both with protected area status, joined by a wetland isthmus. Ometepe's key location combined with its altitudinal range creates a dramatic range of climatic conditions. As a result, all major habitat types found in Nicaragua are present on the island. The eastern-most volcano, Maderas (1,394m), is dormant and clad in forest that shows a transition from moist lowland to montane forest on its more humid eastern flanks, and from lowland dry to elfin forest on its drier western flanks. By contrast Concepción (1,610m) is still active and has very little forest remaining on its slopes, as a consequence of having 80% of the island's 35,000 inhabitants around its base. The isthmus between the two volcanoes provides a considerable area of pristine wetland habitat.

Ometepe possesses a unique range of species that potentially is the highest for any area its size in Nicaragua. This, alongside the island's rich archaeology, led to the 1995 declaration of the whole island as a National Natural and Cultural Heritage Site and the Ministry of Environment and Natural Resources (MARENA) identified the whole island as a national biodiversity conservation priority. Biological surveys have recorded endemic species of flora, threatened avifauna and important mammal populations on this island. Ometepe is now also known to be of considerable importance both for resident bird species, whose populations have declined dramatically elsewhere, as well as for pan-American migrants.

Maderas Volcano was designated as a Natural Reserve in 1983; however it has remained vulnerable to the kind of threats typical of a 'paper park', namely those arising from a lack of management and law enforcement. Through this Darwin Initiative funded project, FFI and its partners are working to protect the biodiversity of the Island of Ometepe by bringing the Maderas Volcano Natural Reserve under effective conservation management through the implementation of a revised and validated management plan. This project also aims to build the capacity of the stakeholders involved - including the Ministry of Environment and Natural Resources (MARENA) - to manage the Reserve effectively, whilst developing the tools necessary for this to become sustainable. This project is making a significant impact on the management of the Maderas Volcano, turning what was effectively a "paper park" into an actively managed natural reserve.

## 2. Project Partnerships

FFI is registered as an international NGO in Nicaragua, where we have worked since 1998, strengthening local and national capacity - a key limiting factor - for biodiversity conservation and protected area management.

**Ministry of Environment and Natural Resources:** MARENA is the official authority responsible for protected area management, biodiversity conservation and compliance with Nicaragua's environmental law. FFI has a long-term cooperation agreement with MARENA and has been working since 2002 to build national capacity to meet Nicaragua's commitments to the CBD. FFI provides technical support and training in best practices as well as guiding and advising on national policy relating to biodiversity conservation and protected areas management.

Since the new government administration took power in Nicaragua in early 2007, we have been working to strengthen our relationships with the new Minister and throughout the MARENA hierarchy. In October 2007, FFI signed a specific Memorandum of Agreement with MARENA focused upon Ometepe; thereby strengthening our mandate and bringing the formal approval of the management plan and the co-management of the reserve, both of which had suffered delays, up the political agenda.

**Fundación entre Volcanes:** FEV is a local NGO based on Ometepe, whose work is focussed upon biodiversity conservation and natural resource management. FFI and FEV signed a Memorandum of Understanding in 2006, outlining the objectives of our partnership to work

together in the conservation and management of biodiversity and natural resources on the island of Ometepe. In the second year of the project, FEV have been a lead partner in the implementation of the comprehensive training program for the park rangers and tourist guides.

**Cooperativa Carlos Díaz Cajina:** This agricultural cooperative operates on the flanks of the Maderas Natural Reserve and run a local ecolodge, from where tourists have access to one of the trails to reach the volcano's crater. The Cooperative is a very important stakeholder in the project because it owns land inside the reserve's boundaries and it has been highly active in the management planning process. A long-term lease regarding the land on which the park ranger station now stands has been signed with the Cooperative. All park ranger activities are planned in coordination with them.

**Alcaldía de Altagracia:** The municipal government office is a key stakeholder in the co-management of the Maderas Reserve. In 2006 the Alcaldía, with the support of the steering committee, requested permission from the government to be granted co-management rights for the Reserve. As reported previously, the new administration blocked the progress of the official comanagement process whilst it reviewed its position on comanagement mechanisms, and as of 31 March 2008 co-management had not been granted. Despite that, the Alcaldía have continued to support MARENA in its official role of protected area management, and have actively participated in the co-management committee. The Alcaldía have recently again put forward a formal request to MARENA to approve the co-management process, and we have unofficially learned from MARENA that they will finally approve and sign the co-manageement agreement in the month of June 2008.

**National Institute of Tourism:** Working in collaboration with the Nicaraguan Institute of Tourism (INTUR), we have teamed up with SwissContact (a Swiss non-profit development organization) and Fundacion entre Volcanes to implement a comprehensive training programme for the MVNR Park Guards and local tourist guides from the Union of Guides of Ometepe. INTUR contributed specialized instructors for seminars on tourism and gave official certification to the programme and to those who completed its training. This coordination between our agencies has enabled us to deliver a far more comprehensive and demanding training programme than was originally envisaged, maximizing impacts and generating opportunities for increased co-financing.

**Union of Guides of Ometepe:** The UGO has not only been a benefactor of the project as one of the target groups for the targeted training programme, but has also supported project activities focused on environmental education and awareness.

### **3. Project progress**

The activities and outputs of the second year of this project have largely gone according to plan, are contributing to improved management and the conservation of the Maderas Volcano Natural Reserve and are catalyzing island-wide impacts. Notably FFI's local team and partners have not only strengthened local involvement, but have also coordinated closely with other national and international organizations working on Ometepe, enabling this project to leverage even greater resources and therefore impact on the ground. As such, this project hopes to serve as a model for conservation management approaches in Nicaragua's protected areas.

Whilst the new MARENA administration has unofficially stated its intention to continue with the process of establishing co-management for Maderas Volcano Natural Reserve and is supporting the process of improving management and conservation of the MVNR, the main factor affecting project progress remains the Nicaraguan government's delay in approving the Management Plan, officially passing the reserve to co-management and approving the formation of the official co-management entity. FFI has made a significant effort at a political level to highlight to the government the importance of moving this process forwards, including bringing it to the attention of the new Minister herself.

#### **3.1 Progress in carrying out project activities**

This report details project activities and achievements of the past 12 months.

##### ***Enhanced species and habitat protection and management***

Historically, Maderas Volcano Natural Reserve has not benefited from a dedicated team of park rangers stationed on the island. By establishing and equipping a team of locally recruited park rangers and a park manager, this project has secured increased physical protection of the MVNRs as well as other parts of the island, including the wetland isthmus, and they undertake regular patrols throughout these areas of key habitat; for the first time ever there is real and permanent environmental protection in Ometepe and improved management of the wildlife species and forest habitats contained within the MVNR.

The park staff are currently contracted by MARENA but, once a new co-management entity is legally in place, responsibility for employing this team will be officially transferred. FFI has provided day-to-day guidance to the rangers, supporting them in their daily protection and monitoring functions, as well as delivering a comprehensive training programme (see below). The rangers are working in close coordination with the municipal environment commission, the military, police and other local entities, and have already received support and recognition from the local community. The Park Manager's role has developed and he now deals with environmental issues all over the island, effectively acting as an environmental inspector. Notably, the environmental commission (which existed prior to the project) is now more active in dealing with environmental issues, for example, in dealing with garbage collection, water contamination, sewage management and disposal.

### ***Establishment of Management Entity***

Following the change in national government that took place in January 2007, the process to select and legally establish the co-management entity continues to suffer delays. The new administration is undertaking a review of co-management of all its protected areas and, although MARENA has unofficially stated its intention to continue with the process of establishing co-management for Maderas, the process for MVNR remains delayed. FFI has made a significant effort at a political level to highlight to the government the importance of moving this process forwards, including bringing it to the attention of the new Minister herself.

The bid from the Municipal Governorship of Altagracia remains under consideration and is supported by the multi-stakeholder co-management committee, which comprises; Fundacion entre Volcanes (local NGO), the Alcaldia of Altagracia (the largest municipality on the island), the Carlos Díaz Cooperative (a community cooperative), representatives of the communities surrounding Volcán Maderas, the Museum of Altagracia and representatives from small tourism enterprises on the island. MARENA has indicated, informally, that they aim to grant the co-management rights for the MVNR in June 2008.

### ***Management Plan approval and publication***

The revised and updated Management Plan for Maderas Volcano Natural Reserve was initially presented to MARENA in 2006, and was re-presented for approval in April 2007 following various rounds of revision. The Plan was developed through a fully consultative process, involving a total of 633 people from local NGO's and businesses (tourism and agriculture) as well as all 10 communities located around the Maderas Volcano. Official approval and publication of the Plan by the new government administration remained pending throughout year 2 of the project. Nevertheless, with financing from the DEFRA Darwin Initiative, US Fish & Wildlife Service and British American Tobacco (Central America), FFI is now working with local partners to promote effective implementation of this plan.

The Maderas Volcano Natural Reserve was created by Ministerial decree in 1983 as an extension of 4,100 hectares on the upper slopes of the volcano. As part of the process of updating the Management Plan, a two-pronged proposal was put forwards to:

1. Change the protected area category of Maderas Volcano from a Natural Reserve to that of a National Park, thereby increasing its legal protection;
2. Re-define and extend the boundaries of the protected area, which will almost double its size from 4,100 to almost 8,000 hectares.

Following a thorough consultation process, local communities, authorities and business interests voted in support of this proposal, which was then presented to the Nicaraguan Government. Any changes to a protected area's limits and status need to be made by legal decree and the proposal is being processed by the central government.

### ***Legal analysis of land rights and regulations***

FFI is also facilitating work to unravel some of the legal issues regarding land rights and ownership in the buffer communities of the MVNR, in conjunction with local authorities and communities. Following land reallocations that took place in the late 1980's, conflicts over land tenure and registration is rife in Nicaragua, and Ometepe is no exception. This process of compiling the registries of all the properties in the Reserve and the buffer zones began in May 2007 and is ongoing.

During the consultation process for the development of the management plan for MVNR, plans to upgrade the level of protection of the whole island were proposed and discussed. The proposal to designate the island as a Biosphere Reserve enjoys widespread support amongst local stakeholders. Political and governmental support for this initiative is also mounting. FFI has facilitated an analysis of the current local institutional and management scenario and relevant legal framework (although our focus is on MVNR, the legal situation in which it finds itself immersed concerns the entire island), which highlighted complications due to two different legal instruments have contributed to the island's designation -- as a National Heritage Site that contains two Natural Reserves (MVNR and Concepción Volcano Natural Reserve).

### ***Infrastructure Construction***

The construction of the park management/ranger office was completed in May 2007. Photos of the official opening, which was attended by the MARENA representatives, the local Mayor and Police Chief, as well as local and national press, have been supplied to Darwin Secretariat. The station is located outside the limits of the Reserve (currently the official limits begin at 800m above sea level), at a key site at the start of one of the principal trails up the side of the volcano. It has a double function as a guard post where the rangers can be based (with dormitory and washroom facilities) as well as a visitor reception centre. We have signed a long term Rights of Use contract with the landowners, the Carlos Dias Cooperative, who are an important local partner in this project.

### ***Improved interpretative tourism trails***

Other infrastructure improvements include improved signage in and around the Reserve, in accordance with MARENA's guidelines for protected area signage in Nicaragua. Three large signboards and 30 interpretative display signs have so far been erected.

Improvements to the trails themselves have also been undertaken. We have worked with another national NGO, Fundacion Cocibolca, to develop and design site plans for two main tourism trails in the Reserve and in the lowland isthmus; drawing on Cocibolca's experience in the construction of trails in another reserve similar to Maderas. The output of this consultancy is being published and will be sent to the Darwin Secretariat.

In February 2008 the improvement of the first interpretative ecotourism trail on the island was completed. The trail is immersed in the dry forest of the isthmus area, passing via one of the project's bird monitoring stations. This community-led initiative involved members of the indigenous communities of the isthmus area and was constructed via an alliance established between the hotel Finca Santo Domingo and the indigenous community (each of whom own part of the land over which the trail passes). A total of 14 people participated in its construction, and a local committee formed by four families who are going to manage the trail maintenance and entrance fees.

### ***Field equipment purchased***

Additional equipment was bought for the park rangers in January 2008; they were provided with standardized uniforms (the same as in all protected areas in Nicaragua) and bicycles as transport around the island, as well as other basic field equipment.

### ***Training and capacity building***

Through this project, FFI has developed a comprehensive training programme for the new MVNR Park Guards and local tourist guides on the island, focusing on its diversity of flora and fauna (mammals, birds, amphibians, reptiles & insects), archaeology, history and culture of the island, local geography, and environmental education. Working in collaboration with the Nicaraguan Institute of Tourism (INTUR), we have teamed up with SwissContact (a Swiss non-profit development organization) and Fundacion entre Volcanes to implement a series of 13 training workshops throughout 2007. This coordination between our agencies, guided by an MoU, has enabled us to deliver a far more comprehensive and demanding training programme than was originally envisaged.

The first part of this programme was implemented in Year 1 with the remainder of the training delivered in Year 2. A total of 25 participants were selected to take part; the 5 park guards and 20 tourist guides. The course has been officially accredited by the Nicaraguan Institute of Tourism and, as such, represents the first accredited training on the island. On completion participants received official certification from INTUR. A document is being produced documenting the whole training process.

Importantly, the project has also facilitated training in national environmental legislation and regulations for local authorities (municipal and police), community leaders and park staff on the island (12 participants). Historically, Ometepe has suffered significant infringements of environmental legislation, largely due to a lack of enforcement capacity from local authorities. This has represented a significant threat to forest and other natural resources on the island. With new enforcement capacity in place (i.e. the new park guards and reserve manager) it was essential to ensure that all corresponding authorities understood their relative roles and responsibilities, as well as the relevant national laws and international legislation (CITES, etc) and their application on the ground. This training covered environmental inspection routines, the issuing of permits (where applicable) for natural resource extraction, and other paperwork and legal procedures (such as how to begin legal proceedings following violation of the law) which the park rangers are now qualified to do. This training was in line with MARENA's legal position and the National Forest Institute (INAFOR) also participated. Coordination and enforcement has already been seen to improve considerably.

### ***Exchange visit to other co-managed protected areas***

As part of the park guards' training programme, FFI also facilitated an exchange of experience with other protected areas in Nicaragua that are under co-management. In June and July 2007, the park guards and reserve manager, alongside representatives from the local authorities, community leaders and other stakeholders visited two protected areas under co-management; Cosiguina Volcano in the north-west of Nicaragua which is managed locally by Fundacion LIDER and Volcan Mombacho which is managed by Fundacion Cocibolca. These initial visits provided a valuable insight into one shared conservation management model "in action", as one of a series of visits to five protected areas under co-management.

### ***Biodiversity Monitoring***

The protocol for biodiversity monitoring for the MVNR and the istian isthmus has been designed and finalised.

Due to the importance of the island for migratory birds and their importance as indicator species we prioritized the development and implementation of the protocol for resident and migratory birds. MARENA has granted permission for research and data collection within the reserve and, following their specific training in biodiversity monitoring techniques (through two sessions of two weeks), the park rangers are now acting as research assistants collecting field data. The park rangers play the central role in this monitoring system, thereby ensuring its long-term sustainability.

Two permanent bird-monitoring stations have been set up in different habitats; one located in the dry forest of the istian isthmus (~40m above sea level), and another in the transitional moist forest on the flanks of the volcano (~400m above sea level). A third station is planned for this season even higher up the volcano. The monitoring protocol is in line with BirdLife International's MoSI programme (Monitoring Over-Winter Survival), with increased monitoring effort during the migrating birds' winter season (approximately 272 hours of monitoring per month during December to March). The rangers are now experienced in setting mist nets and identifying bird species, age and sex, and two rangers were selected to participate in a national bird banding workshop, further strengthening their knowledge. There are few Park Rangers with these abilities in the country.

Biodiversity monitoring data is being recorded in a comprehensive database and initial results have confirmed the diversity of species and high proportion of migratory birds indicated by earlier, more rapid surveys. From the first season's data: of 188 records in the dry forest of the istian, 133 individuals were resident species and 52 were migratory (including *Dendroica petechia*, *Protonotaria citrea*, *Seiurus noveboracensis*). In the 166 records taken in the transitional moist forest, 132 individuals were resident species and 34 were migratory (the most abundant being *Hylocichla mustelina*, *Oporomis formosus*, and *Seiurus aurocapilla*). The data generated during the avian monitoring have been compiled to form part of a national data base

of bird banding and monitoring, thereby contributing to generation and wide access to technical information of birds in Nicaragua. The second season will be concluded in April 2008.

In collaboration with forestry students from Nicaragua's Universidad Nacional Agraria, the rangers have also been establishing and monitoring a series of permanent vegetation plots on Maderas and within the istian – identifying plant species present and estimating tree ages. As part of this, full species inventories (for birds, insects, amphibians and reptiles) will be undertaken. In partnership with FEV, and with project cofinancing, an inventory of the endemic Marlberry tree *Ardisia ometepensis* will be undertaken. It is also of interest that Maderas has a new report of an endemic salamander that is currently being described.

### ***GIS habitat and land-use maps***

Maps were produced in Year 1 and will be published as part of the management plan.

### ***Raising Environmental Awareness:***

The park rangers are now coordinating monthly educational and awareness activities with local schools and students in the rural communities of the MVNR buffer zone. For example UNEP's World Environment Day was celebrated on 5 June 2007 with a special festival organized at one of the local schools. It is worth noting that, following 18 months of rangers patrols and outreach activities, there is already a notable decrease in the number of deforestation events that have occurred, whilst the number of fines for other environmental infringements have increased.

As part of our efforts to strengthen the capacity of our local partner, Fundacion Entre Vocanes, we are working with them on a range of environmental education initiatives and have assisted them in hiring an environmental educator. FEV has been engaged for many years in environmental issues in the communities of Maderas and has a strong relation with local leaders. Through their work, we hope to engage the bigger schools in environmental activities all year round and coordinate efforts with the park rangers for them to give talks and promote the development of tree nurseries, as a means of raising awareness whilst also facilitating reforestation in degraded areas, and other activities.

A total of 10 community meetings have been carried out so far, as well as some facilitated discussions about the importance of the environment and the MVNR. This plan is going to continue in 2008 to ensure that the voice of those most directly affected by the management of the reserve, (i.e. the natural resource users) is heard and that communities benefit from sustainable livelihood options generated by the Reserve, such as eco-tourism.

### ***Tourism and Awareness Strategy:***

Tourism is already an important industry for Ometepe, with a significant number of national and international tourists visiting the island. The importance and relevance of protecting the island natural resources which form the base of most tourist attractions is starting to becoming clear to the tourism sector. This year the island was nominated as a candidate in the web-based contest to vote and select the "New Seven Natural Wonders of the World" ([www.new7wonders.com/](http://www.new7wonders.com/)), increasing its international profile.

A significant new collaboration has been formed between the public and private sectors to promote, and regulate, responsible tourism on the island. An advisory committee was formed between MARENA, Ometepe's Inter-municipal Tourism Commission, the Balgue Environmental Education Program, as well as local communities, NGO's and tourism enterprises, facilitated by the SwissContact development agency and INTUR. FFI joined this initiative, enabling us to promote the environmental agenda as part of this process, in order that Ometepe may become known as a responsible eco-tourism destination that bestows benefits to local communities and wildlife alike. The process of tourism planning for the island is underway, with FFI providing technical support to this process. A situation analysis focused upon MVNR and the Istian isthmus began in May 2007 in order to collate information about the area's natural resources, the existing trails and other infrastructure, alongside tourism numbers and activity, which will feed into tourism guidelines and the island-wide planning process. This initiative will help to ensure that actors within Ometepe's tourism industry are aware of, and comply with, environmental regulations and tariffs, but that they also use local guides and link to other local initiatives, to ensure that income trickles down to the surrounding communities. MARENA and the Ministry of Tourism (INTUR) are in full support of developing such sustainable solutions to tourism in and around protected areas.

Currently we are working together to develop a suite of promotional and environmental awareness materials for the island, that will include banners, brochures, environmental education activities and a web page to promote Ometepe at an international level. Two interns from the Netherlands, sponsored by the OnStage media company, are leading the design process for these materials. As part of our joint efforts with SwissContact, we have collaborated with the printing of a tourism magazine, to promote marketing of Ometepe as a major tour destination in Nicaragua. A total of 8,000 tourist guide were printed and are now under distribution. FFI, USAID and Amigos de la Tierra (España), have also collaborated with us on the development and publication of a bird identification guide for Ometepe, aimed at the international birding tourism market and in line with a regionally recognized and standardized format. A total of 2,000 guides were printed.

### ***Mechanisms for financial sustainability for the NR***

In February 2008 we began a process of investigating sustainable financial mechanisms for MVNR and its buffer communities through environmentally and culturally sensitive tourism and other alternatives. This process is being conducted in conjunction with MARENA's Protected Areas department, local governments and other local stakeholders. Our target is for 50% of the rangers salaries to be incoming through a tourism tariff system by the end of this project. This analysis is being developed in line with the National System of Protected Areas, as the government is keen to replicate its outputs at a national level in other protected areas. This process is being led via a consultancy that is looking not only at benefit sharing mechanisms from park and tourism tariff structures, but also at more innovative income streams such as monetarization of ecosystem services (in particular water).

## **3.2 Progress towards Project Outputs**

Despite the ongoing delays wrought by political changes in Nicaragua in early 2007, overall execution of the project, achievement of outputs and general indicators are on track; management and conservation activities are being implemented in line with the management plan and original project logframe, even though the plan is not official.

## **3.3 Standard Output Measures**

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Total planned from application
6A	A series of 13 training workshops for park rangers and local tourist guides in biodiversity and monitoring, history and culture, environmental education, legislation and enforcement.  Exchange trip to see protected area co-management models at Cosiguina and Mombacho	27 participants	25 participants:  14 participants			27 people	26 people will receive education and training
6B	A series of 13 training workshops (as above).  Two exchange trips (as above)	3 weeks	2 weeks  2 weeks			7 weeks	9 training weeks
7	Ranger Training Manual: (national standards)	0 (in prep)	0 (in prep)			0	1 type of training material



	shared and local manual in preparation)						for use by host country
8	UK project staff time	4 weeks	4 weeks			7	16 weeks
9	Management / action plans published Tourism plan Awareness strategy Sustainable financing plan	0	Pending approval In prep 1 In prep			1	6 (management plan, popular version, species & habitat action plans, tourism & awareness plans)
10	Bird Identification Guide		1			1	2 types of field guide
12B	Biological databases enhanced; excel database of MVNR biological info plus national bird database		2			2	1 species database enhanced
New - Project specific measures	Land use & zonification maps	4	0			4	4 maps (current and potential land use, threats and PA zonification)
New - Project specific measures	Interpretational trails in place with displays & signs Article in Ometepe Guide		1 trail, 33 signs 1 article			2	Awareness materials for local target groups.
14 A	Dissemination of project findings					0	1 conference & 8 workshops
14B	Presentation of project findings					0	1 conference.
15A	National press releases		3			3	2 national press releases
15B	Local press releases	1				1	2 local press releases
17B	National tourism network						1 dissemination network enhanced
19A	National radio interview						1 national radio interview
20	Park infrastructure, scientific equipment, reference materials		£9,800				£9,800 of physical assets
21	Number of permanent educational / training / research facilities or organisations established		2 (HQ & 1 trail complete)			2	Park HQ & guard posts and 3 trails. Co-management organisation.
23	Value of resources raised from other sources	US\$ 165,305 leverag					£59,302, plus \$120,000 USD co-financing & in-kind

		ed					contributions.
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**Table 2 Publications**

Type * (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £ (if applicable)
Management Plan & Maps	Completed but not yet published (final draft submitted with Yr1 Annual Report)			
News article	“Volcán Maderas ya tiene guardaparques” María Haydée Brenes, 14/6/07	El Nuevo Diario, Managua	<a href="http://impreso.elnuevodiario.com.ni/2007/07/14/nacionales/53799">http://impreso.elnuevodiario.com.ni/2007/07/14/nacionales/53799</a>	
News article	“Protegeran naturaleza del Maderas” Noelia Sánchez Ricarte, 14/6/07	La Prensa, Managua	<a href="http://www-ni.laprensa.com.ni/archivo/2007/julio/14/noticias/revista/203151.shtml">http://www-ni.laprensa.com.ni/archivo/2007/julio/14/noticias/revista/203151.shtml</a>	
News articles	Nov & Dec 2007	t.b.c	t.b.c.	
Bird Checklist	Bird Checklist Ometepe Island. Morales S. Et al ISBN 978-99924-868-4-92008.	Managua Nicaragua	Ometepe Island CANATUR	US\$2
Ometepe Guide	“Map & Visitor’s Guide Ometepe 2007-2008”, Octavio Guerro M. (Ed.) 2007	SIMEDA, Managua	<a href="http://www.visitaometepe.com">www.visitaometepe.com</a>	

### 3.4 Progress towards the project purpose and outcomes

The project purpose is to protect the natural resources and biodiversity of Ometepe, through strengthened local management capacity for the implementation of the Maderas Volcano Natural Reserve management plan. Despite the lack of official approval of the plan or co-management entity, the project is progressing well towards achieving this general aim. Project outcomes have even been expanded, made possible with complimentary co-financing leveraged to this Darwin grant.

### 3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

This project is making a highly significant impact on the conservation of biodiversity on the island of Ometepe, in relation to the baseline scenario. The project has catalyzed considerable momentum in protection and enforcement, environmental education and awareness, and community involvement in natural resource management. This year, we have also strengthened our relationship with the Ometepe Tourism Commission (CITOMETEPE), marking an important step for the future work in promoting environmentally friendly tourism on the island.

In the second half of the project, securing sustainability of project outcomes is critical. A key component of this will be in securing a sustainable income stream for the reserve and equitable

sharing of benefits for local communities. Work to harness tourism income and establish the MVNR's potential for other financial mechanisms is currently underway.

#### **4. Monitoring, evaluation and lessons**

Regular meetings are held locally with the main stakeholders from the project to evaluate the progress of the project. The project is also under continuous supervision and follow up by FFI's Nicaragua Programme Coordinator, as well as by FFI Americas Project Manager in Cambridge, to ensure that activities and outputs are contributing to the achievement of the project goal.

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

It is worth noting here that the management planning process, led by Amigos de Tierra (España) in 2005/06, was a detailed and highly participatory process involving all the communities that flank the protected area. This was essential to ensure that the opinions and needs of those most directly affected by the management plan, the natural resource users, were incorporated into its design. A key component of current work to develop sustainable financing plans for the MVNR will establish robust mechanisms for the equitable sharing of benefits from ecotourism and other ecosystem services amongst all 10 communities that surround the volcano.

No major changes were made to project design in response to previous reviews, as the main comments related to clarification of community engagement and benefit sharing not explicit in our first annual report, but inherent in project design.

#### **6. Other comments on progress not covered elsewhere**

FFI has recently secured co-funding to continue building (to 2010) local stakeholder capacity and awareness for protected area management, sustainable natural resource use and achieving conservation impact on the island of Ometepe.

#### **7. Sustainability**

This initiative is strengthening local capacity to promote, sustain and monitor conservation and co-management of these areas of forest and wetland habitat on the island of Ometepe. The project's participatory design guarantees local involvement, ownership and capacity to maintain the processes and mechanisms it will establish or consolidate, via realistic on-the-ground application of approaches identified and supported by these participatory mechanisms. Throughout Ometepe, the aim is for collaborative partners and local organizations to be more committed to natural resource and biodiversity management for the wider island.

This project supports the development of sustainable solutions for local communities to benefit financially from the biodiversity of the island and the unsaturated, but currently uncontrolled, tourism market that it is subject to. By maximizing the potential of the existing ecotourism market, the aim is to pilot and implement financial mechanisms for Maderas Volcano NR that will help lessen dependency on external funding, through the adaptation of a tourist tariff system and other payment mechanisms. Ometepe is an ideal site to develop a pilot scheme around payment for watershed services and, if piloted here, would be the first such model in Nicaragua with great potential for replication elsewhere.

With a legacy of an effective conservation management structure; coherent monitoring systems; trained personnel (manager, guards and guides); basic physical and educational infrastructure, and a mechanism for generating self-sustaining income in place, MARENA and local partners will have sufficient capacity to continue future conservation initiatives on the island of Ometepe.

#### **8. Dissemination**

Two key media events took place this year; the inauguration of the Park HQ & Ranger Station in June 2007 and the official inauguration of the ecotourism trail in February 2008. Around 20-25 national journalists attended each event, publicizing project activities via Nicaraguan television and national press. Throughout the year the project has received excellent media coverage, with three major articles written about Maderas and our project in the months of June, November and December 2007 in the national newspapers. Our collaborations with the private sector (BAT Central America and Enitel Claro in particular, both of which have donated cofinancing to the project) have contributed to this. BATCA also recorded a short promotional video highlighting the different elements of our conservation work on the island. This video, in Spanish, has already been used in a variety of talks with students and local stakeholders. Although we have not been able to directly measure impact, we believe these media have been an important contribution towards raising awareness about the importance of Ometepe for biodiversity in Nicaragua.

More formal dissemination of lessons learnt and project outputs will be undertaken in Year 3.

## 9. Project Expenditure

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

Item	Budget (please indicate which document you refer to if other than your project schedule)	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries (specify)			
TOTAL			

## 10. **OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**

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

## Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2007/08

Project summary	Measurable Indicators	Progress and Achievements April 2007 - March 2008	Actions required/planned for next period
<p><i>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>			<p><i>(do not fill not applicable)</i></p>
<p>Purpose: Natural resources and biodiversity of Ometepe protected, through strengthened local management capacity for the implementation of the Maderas Volcano Natural Reserve management plan.</p>	<p>Approved management plan implemented by co-managers and supported by stakeholders.</p> <p>Effective co-management of the reserve is being implemented.</p> <p>High priority areas of biodiversity are protected.</p> <p>Environmental degradation in and around Maderas NR is reduced.</p>	<p>Management plan, supported by local stakeholders, was submitted for approval in Yr1.</p> <p>There is strengthened local management and the plan is under implementation.</p> <p>Increased protection for MVNR is in place through trained park staff and ranger patrols.</p> <p>Enforcement has improved.</p>	<p>Continued lobbying for official government approval of the management plan and co-management rights for the MVNR (expected June 2008).</p> <p>Capacity building of local management entity.</p> <p>Monitoring impact of management interventions against baseline.</p>
<p>Output 1. Priority areas/species identified from baseline biodiversity and sociological data</p>	<p>Species and habitat conservation and action plans published by end Yr 1 and applied in field Yr 2</p>	<p>Baseline data for MVNR has been analyzed, a database established and priority species identified (migratory birds and endemic plants). Management plan contains action plans and are under implementation.</p>	
<p>Activity 1.1 Monitoring of Migratory Birds</p>		<p>Two permanent bird monitoring stations have been established (one within MVNR and one in the wetland isthmus). The second season's data has been collected and is being analyzed as part of a national database.</p>	
<p>Activity 1.2 Monitoring vegetation plots</p>		<p>Six permanent plots for vegetation monitoring have been established. Protocols have been developed to capture data on endemic species (Ardisia tree, an orquid and a salamander). These plots will also monitor other taxa (birds, mammals, amphibians, reptiles &amp; insects).</p>	

Output 2. Legal Analysis of land rights and regulations for Maderas NR and buffer zone	Current land ownership rights, and applicable laws/regulations, clarified to stakeholders.	Land rights and titles in Nicaragua are complex due to land reallocations of the 1980's and obtaining information has been slow and bureaucratic.
Activity 2.1. Legal Analysis of land rights for Maderas NR and buffer zone		Progress has been made in collating all the necessary data, but it has been a far longer process than envisaged. The final report is now due in Q3 of 2008.
Activity 2.2. Analysis of legal situation of the Reserve		The MVNR is both a Natural Reserve and part of the island-wide national heritage site. This multiple legal classification has necessitated an analysis of the status of the entire island, and a review of its categorization as a Biosphere Reserve. With this clarified framework we anticipate that the process of co-management and the approval of management plan of Maderas can advance.
Output 3. Implementation of officially approved management plan.	Approved management plan being implemented by co-management entity.	Official approval from the Nicaraguan government of both the management plan and the co-management rights for the reserve have not yet been awarded, therefore this output is still pending.
Activity 3.1 Official approval of Management Plan sought and granted		FFI shall continue to keep this high on the agenda of MARENA and the Minister
Activity 3.1 Co-management entity granted MVNR co-management rights		FFI shall continue to keep this high on the agenda of MARENA and the Minister
Output 4. Ecotourism strategy plan, with criteria for services, agreed upon.	Ecotourism plans approved and enacted by INTUR (Nic. Tourism Institute). Set of criteria written into tourism plans.	Tourism planning is underway, with FFI providing technical support to the tourism committee.
Activity 4.1 Situation analysis focused upon MVNR & the Istian isthmus		Began in May 2007
Activity 4.2 Tourism plan published		
Output 5. Improved infrastructure for Maderas NR	Guard posts, management office and field station built. Tourists have basic facilities. Rangers have better means of patrolling the NR.	The Park HQ and Ranger Station was completed, equipped, and officially opened in May 2007. This also serves as the tourist reception to the Reserve. The park rangers are trained and equipped and patrolling 2 main trails on the Volcano .
Activity 5.1 Park HQ and ranger station complete and equipped.		The ranger station has been built, is equipped with basic amenities for the rangers on patrol (kitchen, bunk beds, bathroom, computer, training materials,

		etc) and is fully operational.
Activity 5.2 Access trails and signage improved.		One ecotourism trail has been upgraded and the second (to the summit of the volcano) is now being improved.
Output 6. Effective awareness materials produced for key target groups.	Interpretational trails in place. Tourists, managers, locals able to acquire materials from key points.	Ecotourism trail it is ready in place, this year we will be working in the new trail in Maderas. One document of awareness activities is ready and will be sharing with environmental educator in the island. A brochure with interpretative information is ready.
Activity 6.1 Interpretation materials for the MVNR produced		3 large signs, plus 30 smaller interpretive displays were produced for the tourist trails.
Activity 6.2 Article in Ometepe Guide		Article published.
Output 7. Sustainable finance mechanisms identified and implemented.	Entrance tariff system in place and generating income.	The analysis of appropriate financial mechanisms is currently underway and will be implemented in Yr3.

## **Annex 2 Project's full current logframe**



## **Annex 3 onwards – supplementary material (optional)**

The following documents will be supplied on CD:

- Project's full current logframe
- Biodiversity Monitoring Protocol
- Ranger training programme
- Ometepe guide.
- Ometepe bird checklist
- Selection of photos

### ***Checklist for submission***

	Check
Is the report less than 5MB? If so, please email to <a href="mailto:Darwin-Projects@ectf-ed.org.uk">Darwin-Projects@ectf-ed.org.uk</a> putting the project number in the Subject line.	✓
Is your report more than 5MB? If so, please advise <a href="mailto:Darwin-Projects@ectf-ed.org.uk">Darwin-Projects@ectf-ed.org.uk</a> that the report will be send by post on CD, putting the project number in the Subject line.	
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	✓
Have you completed the Project Expenditure table?	✓
Do not include claim forms or communications for Defra with this report.	✓