



## Darwin Initiative Annual Report



### Important note:

To be completed with reference to the Reporting Guidance Notes for Project Leaders – it is expected that this report will be about 10 pages in length, excluding annexes

**Submission deadline 30 April 2011**

### Darwin Project Information

Project Ref Number	18-011
Project Title	Building a future for Haiti's unique vertebrates
Country(ies)	Haiti
UK Contract Holder Institution	BirdLife International
Host country Partner Institution(s)	Société Audubon Haiti
Other Partner Institution(s)	Zoological Society London, Durrell Wildlife Conservation Trust
Darwin Grant Value	£286,436
Start/End dates of Project	1 April 2010 – 31 March 2013
Reporting period (1 Apr 2010 to 31 Mar 2011) and annual report number 1.	1 April 2010 – 31 March 2011. Annual Report No.1
Project Leader Name	David Wege
Project website	<a href="http://www.birdlife.org/haiti-threatened-vertebrates/">http://www.birdlife.org/haiti-threatened-vertebrates/</a>
Author(s) and main contributors, date	David Wege, Sam Turvey, Rich Young, Jean Vilmond Hilaire, Philippe Bayard

### 1. Project Background

The Massif de la Hotte is a mountainous area in south-westernmost Haiti, and is one of the few areas still retaining forest cover, albeit reduced to a patchwork of remnants within the Macaya National Park. These forests represent one of the most important places in the world for the conservation of threatened vertebrates – 42 globally threatened mammals (Hispaniolan solenodon and Hispaniolan hutia), birds, reptiles and amphibians occur there. Even more significantly, it is the world's most important Alliance for Zero Extinction site, supporting populations of 15 Critically Endangered and Endangered *Eleutherodactylus* frogs that are unique to the massif.

This Darwin Initiative project is helping to ensure that the unique biodiversity also has a sustainable future in these forests. Drawing on UK biodiversity expertise represented by the Zoological Society of London and Durrell Wildlife Conservation Trust, BirdLife is coordinating a broad program to build institutional capacity and strengthen critical skills in Haiti (within Société Audubon Haïti, Fondation Macaya and at the Université Quisqueya) through experiential learning focused on field research, project planning, monitoring and management. This will be enhanced through formal university-based courses, UK training opportunities, and mentorship.

The project is aiming to strengthen the evidence-base on the distribution, population status, ecology and conservation requirements of globally threatened vertebrates and their habitats in

the Massif de la Hotte. Conservation plans for mammals, birds, reptiles and amphibians, and strategic habitat restoration plans will be developed. In the process, Haitian capacity for conserving and monitoring vertebrates and their habitats, and skills in conservation biology, planning, advocacy and management will be strengthened. A targeted media and outreach programme is raising awareness of Haiti's unique vertebrates and their habitats across a range of local, national and international audiences. Specific community-level awareness-raising programmes in the Massif de la Hotte are being conducted in parallel with field research programmes, and will also be used to identify community resource needs for developing longer-term sustainable-livelihood strategies that ensure regional biodiversity conservation.

Fig 1: Darwin project area: Massif de la Hotte, south-west Haiti.



## 2. Project Partnerships

BirdLife has worked well with Société Audubon Haïti (SAH) during the past year. The relationship embraces a number of other projects, thus communication with SAH is on a “more than weekly” basis, primarily by email, but also by skype. SAH has been undergoing some major institutional changes during the last 12 months. The Executive Director, Jean Vilmond Hilaire, left SAH to take up a job establishing the National System of Protected Areas. He has maintained his responsibilities with this Darwin project, but the time he is able to commit is diminishing. At the same time, SAH are in the process of recruiting a replacement, a Massif de la Hotte projects manager, and a number of field staff.

One of the main issues during this period has been the lack of available project staff. As a consequence of the earthquake in January 2010, the various development agencies (multi-lateral and bi-lateral) have been offering consultancies for salaries that are almost double the expected salaries pre-earthquake. As a result, the NGO sector has been further weakened as staff leave for more lucrative jobs, and NGO projects are finding it difficult to find qualified staff to employ. However, in spite of these institutional difficulties, the project has progressed and BirdLife has been well positioned to support SAH through challenging times and this has certainly strengthened the relationship.

BirdLife is the pro-active lead for this project, working in close collaboration with the UK partners ZSL and Durrell. Communication with the UK institutions is done through regular email and phone calls, and then quarterly face-to-face meetings to review project progress. During this first year, Durrell has been primarily facilitating the mapping aspects of the project, with ZSL leading on the biodiversity informatics. These roles will evolve to meet the project outcomes in years 2 and 3. SAH takes fully responsibility for in-country logistics and implementation/ execution on the ground. Their work is supported by the UK partners.

BirdLife has been the primary liaison between the UK institutions and the Haitian partner (SAH), although all parties are copied on email correspondence as appropriate. This communication structure may change as different aspects of the project evolve in Year 2, with ZSL and Durrell potentially taking on thematic roles and responsibilities directly with SAH. Both ZSL and Durrell are new project partners for the BirdLife Caribbean Program. The partnership has developed well during the year – communication has been regular and open, and new project collaborations are being discussed as a result. No formal steering or project committee has been formed yet, although input is sought from all project partners and other, evolving collaborations (see below). As this project starts to interact and dovetail more explicitly with other projects and institutions, a steering committee will be developed.

Both BirdLife and ZSL project staff have received training from IUCN to use the Species Information System (within which IUCN Red List data are managed for all taxa), in order to provide direct updates for Haitian globally threatened vertebrates based on project findings.

#### Other collaborations

A range of highly productive and exciting collaborations have developed during this first year of the project.

The Darwin project (17-025) “Building evidence and capacity to conserve Hispaniola’s endemic land mammals”, led by Durrell, has been particularly helpful to the work in Haiti. The in-country project manager will provide training in mammal surveys in the forthcoming (May 2011) field trip, and the mammal questionnaire developed in the Dominican Republic has been adapted for use in Haiti. The mammal survey protocols developed in the Dominican Republic are being built into the design of fieldwork in Haiti (and will be used in training Haitians). A number of other synergies are being explored to bring maximum benefit to both projects.

The Darwin project (15-033) “Monitoring Bat Biodiversity: Indicators of Sustainable Development in Eastern Europe”, led by Institute of Zoology, developed a bat monitoring protocol and technology ([www.ibats.org.uk/](http://www.ibats.org.uk/)) that will be used in the field to evaluate the bat fauna of the Massif de la Hotte. The results will be analysed by ZSL.

The project is liaising closely with the Vermont Center for Ecostudies (VCE) and Cornell University (USA) in relation to their expertise with researching the avifauna of the Massif de la Hotte. A field biologist from VCE will be present on the forthcoming (May 2011) field trip and will assist with developing an appropriate survey protocol for the project.

In order to develop and deliver on the project’s mapping needs, Durrell have worked closely with the GIS department at the University of Bath, and also with ex-University of Bath lecturer, Mark McConnell, now at the institution Ecological Research and Training. These have been productive relationships for the project.

Blair Hedges at Penn State University (USA: [www.hedgeslab.org/](http://www.hedgeslab.org/)) is the foremost expert on Haiti’s amphibians, and has been very supportive of this Darwin project. The project has been able to provide support to expeditions into the Massif de la Hotte in October 2010 and March 2011, and these trips have resulted in a number of critical project outputs, not least some professional video footage that the project can use in the future (some of which has been used in the video essay found on [www.caribnature.org/](http://www.caribnature.org/), and at [www.youtube.com/watch?v=HwkZn1A8Hd8](http://www.youtube.com/watch?v=HwkZn1A8Hd8)). Blair Hedges’ extensive records of threatened amphibians in the Massif de la Hotte will be databased in Year-2.

The project has also been in close dialogue with Conservation International (USA), specifically Robin Moore (the Program Officer of the IUCN Amphibian Specialist Group and another Haiti amphibian expert), and will continue to be so with a view to building this collaboration further.

The Darwin project was invited to participate in a MacArthur Foundation workshop held in Port-au-Prince in February 2011. The 2-day workshop was held to allow civil society institutions, national and international NGO with biodiversity and conservation project interests in Haiti to

discuss the challenges of project implementation in Haiti, and also to establish relationships with new institutions. The in-country project partners of SAH and Fondation Macaya attended this workshop along with BirdLife, and a number of useful contacts were made and potential collaborations identified – all to be followed up during Year 2.

An agreement is under discussion with UNDP who manage, for the Ministry of Environment, the project to establish the national system of protected areas (NSPA). The agreement focuses on providing logistical support to the Darwin project in return for project data that will be incorporated into the conservation needs-assessments for the protected areas. One of the activities of the UNDP project to establish NSPA is to create capacity to manage the protected area system. This will be done through a graduate conservation and protected area management university program. Another agreement is being drafted that will link the UNDP project with the Université Quisqueya and this Darwin project.

#### CBD focal point

The in-country partner (SAH) has a close relationship with Haiti's CBD focal point. Jean Vilmond Hilaire (SAH's past Executive Director) is now working in close collaboration with the Ministry of the Environment in the development of the National System of Protected Areas. However, the Ministry of Environment was seriously compromised by the earthquake, and the ministry is still not operating at full capacity. The project could do better to communicate progress to the CBD focal point, and also to show where the information generated by the project can assist the government in meeting its CBD obligations. However, more tangible and useful outputs from the project will be generated in years 2 and 3, and these will be communicated to the CBD focal point as a matter of course.

### **3. Project progress**

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

*Evidence-base on distribution, population status, ecology and conservation requirements of globally threatened vertebrates and their habitats strengthened and disseminated*

##### 1.1. Collect baseline data at target field sites

The recent historical literature concerning the status and distribution of threatened mammals and amphibians in the Massif de la Hotte has been collated and assessed. All useful distributional data points have been extracted and are being entered into a database. The literature relating to birds has also been collated and assessed, but not yet entered into the database. These data have been used to start defining which forest areas to target with field surveys. A huge, unpublished dataset concerning the Massif de la Hotte's amphibians resides with Blair Hedges at Penn State University. The project will work with Blair Hedges to database this information and make it publicly available in Year-2. As part of this developing relationship with Penn State University (who work closely with our in-country partner SAH), this project supported an expedition to assess the status of amphibians at two target field site areas of the massif during October 2010.

##### 1.2. Build GIS and populate with data

An assessment of GIS coverages relevant to the Massif de la Hotte has been made. The conclusion was that while the basics of roads, altitude, towns/ villages exist, nothing is available in relation to vegetation within the massif (at a resolution that would allow for planning field work or monitoring future changes in forest cover). To address this project-delaying gap (the development of a field survey plan was dependant on forest mapping), a formal change request was made to the Darwin Initiative to divert some Year-1 funds to contract Bath University to develop a vegetation map from Landsat images.

Due to extensive cloud cover, extreme relief of the massif and poor availability of existing ground-truthing data, mapping the remaining forest of the Massif de la Hotte through remote sensing has proved highly challenging. In the first phase of vegetation mapping we have

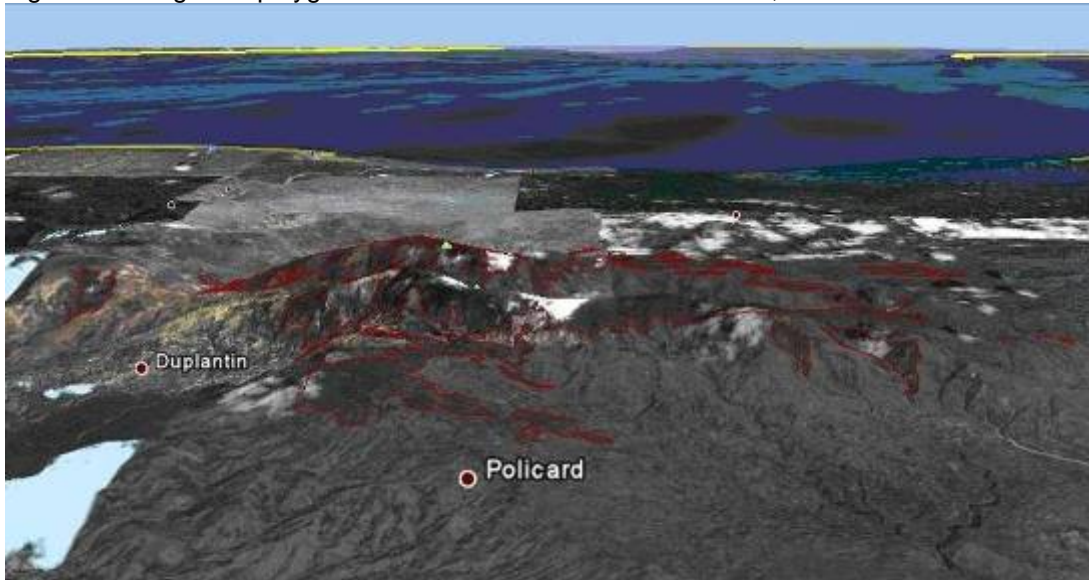
combined Landsat 7 imagery and hand-digitising of high resolution imagery in Google Earth to identify potential forest patches which can then be targeted during field surveys.

Bands 1,2,3,4,5 and 7 of seven Landsat 7 scenes were re-sampled to exactly 30 m resolution and windowed to cover the Massif de la Hotte region. Due to the extreme relief in Massif de la Hotte, all bands of all scenes were terrain-corrected to remove topographic shadow using image metadata (solar elevation angle, solar azimuth angle) and a 30 m DEM derived from an exact interpolation of SRTM elevation data using regularised splines. All corrected bands of all scenes were then sequentially overlaid in a pectate manner to produce a gap-filled mosaic reflectance product which is atmospherically normalised across space and time and therefore suitable for modelling and monitoring applications.

These corrected c.2010-acquired reflectance data were processed to make natural colour and false colour composites which were interpreted with heads-up digitising to produce a set of polygons for the forest patches in the study region. These were then projected to latlong and exported as kml files. The elevation model and several composites were also projected to latlong and exported as kmz files for display in Google Earth and comparison with Google Earth's high spatial resolution commercial multispectral data which, for the study region, was acquired in 2007. The unclassified Landsat-derived vegetation map will be classified based on ground-truthing (which will be done during the May 2011 field trip).

Through a partnership with Ecological Research and Training, we have created a GIS for the Massif de la Hotte by sourcing publicly available environmental, topographic, geological, social and political spatial data. The data were cleaned and clipped to the appropriate area, and then all converted to the same projection. We have identified a number of critical gaps in spatial data and further data will be sourced during our forthcoming trip to Haiti. All of the map data (GIS and associated biological data) have been managed in the UK to date. However, an agreement between SAH and the national GIS lab (CNIGS) has been drafted, and the intention is to repatriate the mapping data in May 2011, and to start building national capacity to manage and develop these data. All the data in the GIS are described in a metadata file so that their provenance is known to all project partners. The GIS is now ready to manage field ecological data and will be a valuable tool for the biodiversity assessment in year 2 and 3 of the project.

Fig 2: Hand-digitised polygons of forest on the Massif de la Hotte, based on 2007 satellite images.



### 1.3. Analyse occupancy and habitat data

Activity not scheduled for Year-1.

#### 1.4. Prepare scientific and other technical documents

Protocols for mammal surveys developed by the Darwin project (17-025) “Building evidence and capacity to conserve Hispaniola’s endemic land mammals” will be trialled during the May 2011 field trip and adapted to the Haitian situation as necessary before being finalised. Protocols for amphibian surveys have been discussed with experts at Penn State University and Conservation International, and they will be field tested in May 2011. Many of the *Eleutherodactylus* frogs are cryptic species and most easily identified based on genetic profiles. Taking genetic material from frogs in the field (buccal swabs or toe clippings) will be tested in May, and then compared against the genetic bar code library for the genus held by Penn State University. Bird survey protocols will be developed with Vermont Center for Ecostudies during the May field trip. Detailed population density estimates are available for a number of target species from three locations in the Massif de la Hotte, thus the focus will be on collecting presence/ absence data for a wide range of forest remnants.

*Strengthened Haitian capacity (at local community, local and national levels) for conserving and monitoring globally threatened vertebrates and their habitats*

#### 2.1. Establish national biodiversity database and clearing-house

This activity has been delayed. In hindsight this should have been scheduled for Year-2. Some progress was made in developing a project website through which to access information on species and maps. However, in discussion with SAH and others in Haiti, and with feedback from the CBD focal point, it is clear that this national biodiversity database and clearing-house needs to be generated nationally and with full national ownership. The Darwin project will support this process to achieve the Output, but this will be done during year-2.

#### 2.2. Develop steering committees, networks and mentorship systems

An extensive network of Haiti experts and conservation practitioners has been established during the last 12 months. Communication within this network is good, and this is demonstrated by the institutional make-up on the May 2011 field trip with participants from Vermont Center for Ecostudies, IUCN, Conservation International, and the Darwin project in Dominican Republic all planning to attend. Individuals from this network form part of a mentorship system that will start to deliver skills transfer benefits during Year-2. With the delay in field work in Year-1, the systems developed to date have not been tested yet..

A presentation about this Darwin project was made to a Haitian protected area working group formed by various small groups of institutions focused on specific protected areas. The Macaya protected area group comprises representatives from SAH, ORE, Fondation Macaya and Fondation Nouvelle Grande Anse. This group will play the role of a steering committee for all projects that relate to biodiversity and conservation in Massif de la Hotte. Efforts will be made through this Darwin project to reinforce the group with academic and private sector representatives.

#### 2.3. Facilitate MCP Planning workshops and community participation

Activity not scheduled for Year-1.

#### 2.4. Produce best-practice, MCP and monitoring manuals

Activity not scheduled for Year-1.

#### 2.5. Ensure adoption of MCPs into Haiti’s NBSAP

Activity not scheduled for Year-1.

*Skills in conservation biology, planning, advocacy and management are strengthened in local partner organisations and more widely in Haiti*

### 3.1. Implement UK- and Haiti-based university training for local conservationists

Discussions have been held with *Quisqueya University* in relation to the formal partnership with the Environmental Masters Program. An agreement is being drafted for consideration by Academic Council of the University. With regards the transfer of skills from UK to Haiti, this activity has not started yet, due to the delay in initiating field work. Skills transfer will start in earnest during the May 2011 field trip.

### 3.2. Ensure ongoing skills transfer for Haitian project staff

The systems for skills transfer have been identified, and once a skills needs assessment has been completed for the new project staff (in May 2011), the mechanisms for ensuring skills transfer throughout the project will be finalised.

### 3.3. Undertake regular performance appraisals of Haitian project staff

A number of new Haitian project staff are being hired at the start of Year-2, and will be evaluated during the field trip in May 2011. No performance appraisals were undertaken during Year-1, although an independent evaluation of Sylvain Desir (SAH staff in the Massif de la Hotte) was done in February 2011 by BirdLife's Partner in Canada (Nature Canada).

*Awareness of status and conservation needs of globally threatened Haitian vertebrates substantially improved at local, national and international level*

### 4.1. Implement a programme of local and national awareness raising

No progress has been made on local and national awareness raising other than through the questionnaire described in 4.3 below.

### 4.2. Implement a programme of international awareness raising

International media coverage for the project has been achieved through 6 web articles (URLs pasted below). A profile of the project is available through the Eco-Index website of over 1,000 conservation projects (URL below: the Eco-Index website receives over 30,000 hits a month). The project supported a photographic and videographic expedition to Macaya in October 2010. The video and photos from this trip can be used by the Darwin project in the future. The video will be used for the informational films towards the end of the project, and the photos for awareness raising. Some video has already been used by Penn State University for the video essay found on [www.caribnature.org/](http://www.caribnature.org/), and at [www.youtube.com/watch?v=HwkZn1A8Hd8](http://www.youtube.com/watch?v=HwkZn1A8Hd8). The Darwin Initiative and BirdLife are acknowledged at the end of this video.

Project news stories:

[edition.cnn.com/2010/WORLD/americas/09/10/haiti.biodiversity/#fbid=la2fCE2pcxk&wom=false](http://edition.cnn.com/2010/WORLD/americas/09/10/haiti.biodiversity/#fbid=la2fCE2pcxk&wom=false)

[www.eco-index.org/search/results.cfm?projectID=1427](http://www.eco-index.org/search/results.cfm?projectID=1427)

[www.durrell.org/About-Durrell/Durrell-News/Saving-unique-biodiversity-in-Haiti/](http://www.durrell.org/About-Durrell/Durrell-News/Saving-unique-biodiversity-in-Haiti/)

[www.edgeofexistence.org/edgeblog/?p=825](http://www.edgeofexistence.org/edgeblog/?p=825)

[www.zsl.org/science/news/building-a-future-for-haitis-unique-biodiversity.690.NS.html](http://www.zsl.org/science/news/building-a-future-for-haitis-unique-biodiversity.690.NS.html)

[www.birdlife.org/news/news/2010/03/haiti\\_darwin.html](http://www.birdlife.org/news/news/2010/03/haiti_darwin.html)

[www.birdlife.org/haiti-threatened-vertebrates/](http://www.birdlife.org/haiti-threatened-vertebrates/)

### 4.3. Survey attitudes towards threatened vertebrates and habitat in local communities

The "Awareness and perceptions of Hispaniola's threatened vertebrates" questionnaire developed for the Darwin project in Dominican Republic (threatened endemic land mammals) was adapted to use in Haiti and translated into Haitian Creole. The questionnaire follows a methodology developed for an MSc thesis ([www.iccs.org.uk/thesis/consoci/msc10-secades.cristina.pdf](http://www.iccs.org.uk/thesis/consoci/msc10-secades.cristina.pdf)). It has been trialled on 10 people from four localities in the Massif de la Hotte, and will be refined as a result of this initial trial before being used widely across the massif to establish a baseline attitude and awareness assessment. Initial observations from the trial are that most people never animals first hand and can't differentiate between Nelong, Zagouti, rat and mangoost. There is confusion in interpreting animal names. The impact of cats

and dogs on the forest is not known to the people, but they know very well the “negative” impact of Zagouti or Nelong on their crops. They consider these animals a pest. All agree that these animals are very rare in the last 10 years.

### 3.2 Progress towards Project Outputs

Output 1. *Evidence-base on distribution, population status, ecology and conservation requirements of globally threatened vertebrates and their habitats strengthened and disseminated*

Progress (as defined by the Measurable Indicators) has been made as follows:

- Baseline data for globally threatened vertebrates has been collated with some analysis. Additional data (especially regarding the *Eleutherodactylus* frogs recorded by Blair Hedges) need to be databased and will be done so during summer 2011. The remaining species data still requires some analysis, and a report completed (to accompany the database of species information that will be repatriated to our in-country project partner).
- A GIS has been built and populated with some data. Further data needs to be added, and the development of this into a national biodiversity database and clearing-house needs to be carefully considered and designed. This is scheduled for completion during Year-2.
- Long-term monitoring protocols and survey design are being developed, and guidelines are being drafted. These build on protocols used for mammal surveys (in the Dominican Republic Darwin project), and will be refined/ further developed during the May field trip. These are scheduled for completion in Year-2.
- No formal steering committee has yet been formalised, but regular dialogue with Haitian biodiversity experts (within and outside the country) will provide a solid foundation on which to build a committed steering committee for the second half of the project and beyond. The emphasis here is on building a lasting “advisory” panel for Haiti rather than a project-specific committee. Discussions with Macaya protected area group (see 2.2 above) will also be helpful in the development of a lasting advisory panel.

Output 2. *Strengthened Haitian capacity (at local community, local and national levels) for conserving and monitoring globally threatened vertebrates and their habitats*

Progress (as defined by the Measurable Indicators) has been made as follows:

- Progress has been delayed in terms of establishing a National biodiversity database and clearing-house. Further discussions are required to ensure that the biodiversity database and clearing-house are created with full national ownership and applicability. Some progress has been made in terms of collating species data (and databasing these), published papers and mapping, and this will continue.
- An extensive network of Haitian experts and conservation practitioners (national and international) has been established. Discussions have started with the Macaya protected area group. However, no advisory groups/ panels or steering committees have yet been formalised. This will be done in a considered way that ensures a lasting benefit to the Haitian conservation community.
- Local partners in the project area are aware of the Darwin project. However, full community participation and the planning workshops were not anticipated deliverables for Year-1.
- The production of best-practice guides and monitoring manuals were not anticipated deliverables for Year-1.
- The adoption of the conservation plans into Haiti’s NBSAP process was not an anticipated deliverable for Year-1.



**Output 3.** *Skills in conservation biology, planning, advocacy and management are strengthened in local partner organisations and more widely in Haiti*

Progress (as defined by the Measurable Indicators) has been made as follows:

- Discussions have been held with *Quisqueya University* in relation to the formal partnership with the Environmental Masters Program. An agreement is being drafted for consideration by Academic Council of the University.
- The systems for skills transfer have been identified, but a skills needs assessment needs to be completed for the new project staff (in May 2011),
- Skills transfer (from UK to Haiti staff) will start in earnest during the May 2011 field trip.
- Indicators relating to workshop facilitation, drafting scientific papers and media releases are scheduled for Year-2.

**Output 4.** *Awareness of status and conservation needs of globally threatened Haitian vertebrates substantially improved at local, national and international level*

Progress (as defined by the Measurable Indicators) has been made as follows:

- Calendars, posters and the informational film were not anticipated deliverables for Year-1. However, the project supported a photographic and videographic expedition to provide material for these deliverables.
- An attitudes and awareness questionnaire has been developed and translated into Creole. This has been trialled and will be used to establish a solid baseline during Year-2. Although the questionnaire will be used for monitoring attitudes, a second “survey” may not be possible in the lifetime of this project.

International media coverage for the project has been achieved through 6 web articles, and the project profile is available through the Eco-Index website of conservation projects.

### 3.3 Standard Measures

The project application mentioned some planned numbers of Standard Output Measures, but not in the format of the table below. The figures in the table reflect as best possible the intentions of the project although some areas (such as the distinction between national and local radio/ TV/ media) will need to be reviewed as the nature of the Haitian media system becomes more apparent. Most Output Measures were scheduled to be delivered in years 2 and 3, with this first year primarily dealing with project set-up, design, background research and data collation.

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Number planned for reporting period	Total planned from application
3	Number of people to attain other qualifications (i.e. not outputs 1 or 2 above)	0			0	0	1
4C	Number of postgraduate students to receive training	0			0	0	20
5	Number of people to receive at least one year of training (which does not fall into categories 1-4 above)	0			0	0	1
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5)	0			0	2	2
9	Number of species/habitat management plans (or action plans) to be produced for governments, public authorities, or other implementing agencies in Haiti	0			0	0	3

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Number planned for reporting period	Total planned from application
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	0			0	0	3
11A	Number of papers to be published in peer reviewed journals	0			0	0	1
11B	Number of papers to be submitted to peer reviewed journals	0			0	0	3
12A	Number of computer based databases to be <b>established</b> and handed over to Haiti	0			0	0	2
14A	Number of conferences/seminars/workshops to be <b>organised</b> to present/disseminate findings	0			0	0	3
14B	Number of conferences/seminars/workshops <b>attended</b> at which findings from Darwin project work will be presented/disseminated.	0			0	0	4
15A	Number of national press releases in Haiti	0			0	0	6
15B	Number of local press releases in Haiti	0			0	0	?
15C	Number of national press releases in UK	1			1	1	3
17B	Number of dissemination networks to be <b>enhanced/extended</b>	0			0	0	1
18A	Number of national TV programmes/features in Haiti	0			0	0	2
18C	Number of local TV programmes/features in Haiti	0			0	0	?
19A	Number of national radio interviews/features in Haiti	0			0	0	4
19C	Number of local radio interviews/features in Haiti	0			0	0	?
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	0			0	0	3
New-measure							

**Table 2 Publications**

No publications were produced (or intended to be produced) during Year-1 of the project.

Type (e.g. journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £

### **3.4 Progress towards the project purpose and outcomes**

At the level of the project purpose “*Improve the conservation management and status of Haiti’s globally threatened vertebrates, and the integrity of the forest habitats they depend upon, within the key biodiversity area of the Massif*” no progress has been made against the Measurable Indicators. However, progress towards achieving the project outputs (as outlined above) is tangible, and provides an essential foundation for progress in Years 2 and 3. The Indicators and Assumptions still appear to be relevant and appropriate.

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

Similarly to the project purpose, solid progress against high level goals is not anticipated to be achieved until Year-3.

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

Many of the monitoring efforts are outlined above (3.1 – 3.4), and broadly follow the planned Monitoring Activities, the indicators for which are:

- Indicator 1: Establish Project Implementation Team and report on progress against the Measurable Indicators and individual institutional workplans.
- Indicator 2: Undertake 6-monthly formal project evaluations to feed into the 6-month and annual (end of year) reports to Darwin.
- Indicator 3: Assess increased skills/capacity of in-country conservationists/host-country project staff on a regular basis.
- Indicator 4: Assess attitudinal change towards threatened vertebrates and habitat conservation in local communities.

The Project Implementation Team has functioned well in the UK (BirdLife/ ZSL/ Durrell), and adequately in Haiti. However, the issues related to project staffing in Haiti (as outlined above have delayed the formation of a dynamic international team). Formal evaluations have been undertaken against the logframe and proposed activities. This is done on a 3-monthly basis and has led to a number of “adaptive management” decisions to address emerging issues (primarily in Haiti). The increase in skills and capacity will be assessed against a needs assessment which will be undertaken in May 2011. This was not possible in Year-1 due to staffing issues. Attitudes towards threatened vertebrates and conservation will be assessed although the assessment of change in attitude may need to be re-assessed as a project output (i.e. it may not be possible to demonstrate within the life-time of the project).

The lessons learnt from Year-1 project implementation are as follows:

- The socio-economic situation in Haiti is still evolving rapidly (post-earthquake) and issues such as staff being “poached” from NGOs by the development agencies with the promise of highly inflated salaries are both unforeseeable and very difficult to adapt to.
- With a lack of human capacity in country, adaptive project management is critical to keep the project moving forward (and the Darwin Initiative staff has been both understanding and flexible to this need).

Taking a long-term, sustainable view is the only viable approach to project development in Haiti. Slower progress is a sacrifice worth making if it allows for the generation of buy-in and ownership “in-country”.

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

N/A.

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

In addition to the generic staffing capacity issues mentioned above, CNIGS (the national GIS lab) lost staff and 25% of their data in the January 2010 earthquake. This delayed the development of field survey plan. To adjust for this, funds allocated for a herpetological expert were diverted (as a result of a formal change request) to develop a vegetation map (in collaboration with Bath University). The Quisqueya University was destroyed in the earthquake thus discussions about formal agreements for training through Masters degrees have been slow. Also as a result of this, the development of a national database and clearing-house has been delayed although the collation of information for these has been developing well.

Opportunities arising from collaboration with our local project partner (SAH) and Philadelphia Zoo/ Conservation International have led to a number of expeditions that have searched for the threatened frogs in our project area and (in association with the International League of Conservation Photographers), taken photos and HD video of forest, people, frogs and the communities. The scientific results will be used in this Darwin project, as will the photographic materials (for local, national and international media and awareness efforts). Moreover, the collaboration will develop thus that future field expeditions by any of these institutions will aim to fill "agreed to" information gaps, thus maximizing the impact of each institution's efforts.

## **7. Sustainability**

One of the major outputs of Year-1 has been the development of multiple collaborations to help achieve the project outputs and more importantly sustain the impacts long-term. These collaborations and partnerships are described in section 2, but they demonstrate the interest in the focus that this Darwin project has and our success in promoting this. The convergence of interests between international NGOs active in Haiti will be critical to long-term sustainability, and the maintenance/ development of local capacity. BirdLife managed to secure funds in October 2010 from the MacArthur Foundation for institutional capacity building of SAH. This, combined with support from the US Forest Service (March 2011) will help to build a strong institutional foundation to ensure sustainability. BirdLife is working with SAH to develop into a strong (and formal) BirdLife Partner. It is the BirdLife Secretariat's responsibility to support its partners, so in terms of our commitment to SAH, this is long-term. However, in developing their institutional capacity, we would aim to scale back our direct support or field activities as soon as they were taking this on directly with donors.

## **8. Dissemination**

There has been little dissemination in Haiti during Year-1 (as described under the Activities and Outputs sections above). However, the Darwin project participated in a MacArthur Foundation workshop held in Port-au-Prince in February 2011. The 2-day workshop was held to allow civil society institutions, national and international NGO with biodiversity and conservation project interests in Haiti to discuss the challenges of project implementation in Haiti, and also to establish relationships with new institutions. This provided an opportunity to profile the project to a broad national (and international) audience. The project is set up to build the capacity of our national partner (SAH) such that they will continue to promote Haitian biodiversity and conservation long-term. Mechanisms and tools to assist with this will be developed during Year-2?

## 9. Project Expenditure

**Table 3 Project expenditure during the reporting period (Defra Financial Year 1 April 2010 to 31 March 2011)**

Item	Budget (please indicate which document you refer to if other than your project application or annual grant offer letter)	Expenditure	Variance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery) Operating costs			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment (specify)			
Others (specify)			
Salaries (specify by individual)			
TOTAL			

A carry forward of £17,890 was agreed with LTS on 18 February 2011. The variance outlined in the above table is in line with the expected underspend that led to the carry forward request.

## 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 LTS and the Darwin Secretariat to publish the content of this section](#)

There were no outstanding achievements in Year-1.

## Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2008/09

Project summary	Measurable Indicators	Progress and Achievements April 2010 - March 2011	Actions required/planned for next period
<p><b>Goal:</b> <i>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>Solid progress against high level goals is not anticipated to be achieved until Year-3.</p>	<p><i>(do not fill not applicable)</i></p>
<p><b>Purpose</b>            Improve the conservation management and status of Haiti's globally threatened vertebrates, and the integrity of the forest habitats they depend upon, within the key biodiversity area of the Massif</p>	<p>MCPs for globally threatened vertebrates implemented and producing monitoring data • Rate of loss of critical habitat for globally threatened vertebrates reduced/ halted            • State, Pressure, Response variables gathered each year for the massif and its globally threatened vertebrates • MCPs for globally threatened vertebrates built into Haitian National Biodiversity Strategy – Year 3</p>	<p>No tangible progress at the level of the project purpose indicators. Progress against the Outputs is described below.</p>	<p>State, Pressure, Response variables will be gathered for the massif and its globally threatened vertebrates.</p> <p>Progress will be made on drafting MCPs.</p>
<p><b>Output 1.</b> Evidence-base on distribution, population status, ecology and conservation requirements of globally threatened vertebrates and their habitats strengthened and disseminated</p>	<p>Scientifically robust baseline data for globally threatened vertebrates collated, analysed and reported – Year 1 • Baseline occupancy survey completed and GIS built and populated with data as part of a Haitian biodiversity database and clearing-house – Year 2 • Habitat suitability models, key conservation zone maps, and long-term species/ habitat resiliency plans produced – Year 2 •</p>	<p>Baseline data for globally threatened vertebrates has been collated with some analysis. Additional data will be databased during summer 2011. The remaining species data still requires some analysis, and a report completed.</p> <p>A GIS has been built and populated with some data. Further data needs to be added, and developed into a national biodiversity database and clearing-house. This is scheduled for completion during Year-2.</p> <p>Long-term monitoring protocols and survey design are being developed, and guidelines are being drafted. These will be refined/ further developed during the May field trip and are scheduled for completion in Year-2.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2010 - March 2011	Actions required/planned for next period
	<p>Long-term monitoring protocols and survey design developed and guidelines drafted – Year 2 • National MCP steering committee established • Draft MCPs for globally threatened vertebrates published, and implementation started.</p>	<p>No formal steering committee has yet been formalised. A committed steering committee will be formalised for the second half of the project and beyond. Discussions with Macaya protected area group will also be helpful in the development of a lasting advisory panel.</p>	
<p>Activity 1.1 Collect baseline data at target field sites</p>		<p>The literature concerning the status and distribution of threatened birds, mammals and amphibians in the Massif de la Hotte has been collated and assessed. These data have been used to start defining which forest areas to target with field surveys.</p> <p>A huge, unpublished dataset concerning the Massif de la Hotte's amphibians resides with Blair Hedges at Penn State University. These data will be databased (as part of the Darwin project) in Year-2.</p>	
<p>Activity 1.2. Build GIS and populate with data</p>		<p>An assessment of GIS coverage relevant to the Massif de la Hotte has been made, and a GIS pulled together. To address the significant gaps, funds were diverted to contract Bath University to develop a vegetation map from Landsat images.</p>	
<p>Activity 1.3. Analyse occupancy and habitat data</p>		<p>Activity not scheduled for Year-1.</p>	
<p>Activity 1.4. Prepare scientific and other technical documents</p>		<p>Protocols for animal surveys have been discussed in detail and will be trialled on the field trip in May 2011 before finalisation.</p>	
<p><b>Output 2.</b> Strengthened Haitian capacity (at local community, local and national levels) for conserving and monitoring globally threatened vertebrates and their habitats</p>	<p>Conservation and sustainable resource use agreements made between local communities and national project partners • Conservation networks of local community groups created • Local community members participate in project activities • Three participatory MCP Planning workshops held and documents published – Year 3 • Monitoring data collection protocols</p>	<p>Progress has been delayed in terms of establishing a National biodiversity database and clearing-house. Some progress has been made in terms of collating species data (and databasing these), published papers and mapping, and this will continue.</p> <p>An extensive network of Haitian experts and conservation practitioners has been established. Discussions have started with the Macaya protected area group. However, no advisory groups/ panels or steering committees have yet been formalised.</p>	<p>Local partners in the project area are aware of the Darwin project.</p>

Project summary	Measurable Indicators	Progress and Achievements April 2010 - March 2011	Actions required/planned for next period
	<ul style="list-style-type: none"> <li>and experimental design developed and fully tested (and manuals written) •</li> <li>Cross-sectoral steering committee •</li> <li>Haitian biodiversity database and clearing-house established •</li> <li>National network of conservation practitioners and experts established – Year 2 •</li> <li>UK – Haiti mentoring system established</li> </ul>		
Activity 2.1. Establish national biodiversity database and clearing-house		This activity has been delayed. In hindsight this should have been scheduled for Year-2. Some progress was made in developing a project website through which to access information on species and maps.	
Activity 2.2. Develop steering committees, networks and mentorship systems		<p>An extensive network of Haiti experts and conservation practitioners has been established during the last 12 months. Individuals from this network form part of a mentorship system that will start to deliver skills transfer benefits during Year-2.</p> <p>The Macaya protected area group will play the role of a steering committee for all projects that relate to biodiversity and conservation in Massif de la Hotte.</p>	
Activity 2.3. Facilitate MCP Planning workshops and community participation		Activity not scheduled for Year-1.	
Activity 2.4. Produce best-practice, MCP and monitoring manuals		Activity not scheduled for Year-1.	
Activity 2.5. Ensure adoption of MCPs into Haiti's NBSAP		Activity not scheduled for Year-1.	
<p><b>Output 3.</b> Skills in conservation biology, planning, advocacy and management are strengthened in local partner organisations and more widely in Haiti</p>	<ul style="list-style-type: none"> <li>Collaboration with Université Quisqueya postgrad program established •</li> <li>1 Haitian conservationist receives two-year fellowship on EDGE Fellows programme, including UK training course •</li> <li>Minimum of 20 Haitian conservationists attend the postgraduate course run in Haiti •</li> <li>1 Haitian conservationist attends DESMAN course in Jersey •</li> <li>20 students from the postgrad program participate in preparation of MCP</li> </ul>	<p>Discussions have been held with <i>Quisqueya University</i> in relation to the formal partnership with the Environmental Masters Program. An agreement is being drafted for consideration by Academic Council of the University.</p> <p>The systems for skills transfer have been identified. A skills needs assessment will be completed for the new project staff (in May 2011).</p> <p>Skills transfer (from UK to Haiti staff) will start in earnest during the May 2011 field trip.</p> <p>Indicators relating to workshop facilitation, drafting scientific papers and media releases are scheduled for Year-2.</p>	



Project summary	Measurable Indicators	Progress and Achievements April 2010 - March 2011	Actions required/planned for next period
	documents • Counterpart project manager leads drafting of 1 article for peer-reviewed journal, and 1+ media articles • Haitian project manager plays key role in leading MCP workshops and drafting documents • Successful skills transfer/ responsibility		
Activity 3.1. Implement UK- and Haiti-based university training for local conservationists		An agreement is being drafted for consideration by Academic Council of the <i>Quisqueya University</i> re: a formal partnership with the Environmental Masters Program.  With regards the transfer of skills from UK to Haiti, this activity has not started yet, due to the delay in initiating field work.	
Activity 3.2. Ensure ongoing skills transfer for Haitian project staff		The systems for skills transfer have been identified. A skills needs-assessment will be completed for the new project staff (in May 2011).	
Activity 3.3. Undertake regular performance appraisals of Haitian project staff		A number of new Haitian project staff are being hired at the start of Year-2, and will be evaluated during the field trip in May 2011. No performance appraisals were undertaken during Year-1, although an independent evaluation of Sylvain Desir (SAH staff in the Massif de la Hotte) was done in February 2011 by BirdLife's Partner in Canada (Nature Canada).	
<b>Output 4.</b> Awareness of status and conservation needs of globally threatened Haitian vertebrates substantially improved at local, national and international level	5,000 threatened vertebrate calendars and posters produced and distributed at meetings with local communities, and in local schools • 'Informational' film on Haitian vertebrate conservation (and its relevance to sustainable-use and livelihoods) produced and broadcast on Haitian television and at local community meetings/ schools • Survey of attitudes shows improved awareness and perception of globally threatened vertebrates in communities local to project field sites during the	Calendars, posters and the informational film were not anticipated deliverables for Year-1. However, the project supported a photographic and videographic expedition to provide material for these deliverables.  An attitudes and awareness questionnaire has been developed and translated into Creole. This has been trialled and will be used to establish a solid baseline during Year-2. Although the questionnaire will be used for monitoring attitudes, a second "survey" may not be possible in the lifetime of this project.  International media coverage for the project has been achieved through 6 web articles, and the project profile is available through the Eco-Index website of conservation projects.	

Project summary	Measurable Indicators	Progress and Achievements April 2010 - March 2011	Actions required/planned for next period
	<p>project (baseline Year 1 compared with Year 3) • 6 national radio and TV interviews, 6 national and 1 international newspaper articles • 6 articles and regular blogs published on partner websites • Increasing number of "Haiti" hits on partner websites</p>		
<p>Activity 4.1. Implement a programme of local and national awareness raising</p>		<p>No progress has been made on local and national awareness raising other than through the questionnaire described in 4.3 below</p>	
<p>Activity 4.2. Implement a programme of international awareness raising</p>		<p>International media coverage for the project has been achieved through 6 web articles. A profile of the project is available through the Eco-Index website. The project supported a photographic and videographic expedition to Macaya in October 2010. The video and photos from this trip can be used by the Darwin project in the future.</p>	
<p>Activity 4.3. Survey attitudes towards threatened vertebrates and habitat in local communities</p>		<p>An "Awareness and perceptions of Hispaniola's threatened vertebrates" questionnaire developed for the Darwin project in Dominican Republic was adapted to use in Haiti and translated into Haitian Creole. The questionnaire has been trialled on 10 people from four localities in the Massif de la Hotte, and will be used extensively in Year-2.</p>	

## Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Goal:</b> Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.			
<b>Sub-Goal:</b> Conservation status of Haiti's globally threatened vertebrates and their habitats significantly improved	Progress on implementing Monitoring and Conservation Programmes ( <b>MCPs</b> ) for all of Haiti's globally threatened vertebrates made within two years of End of Project • MCPs for globally threatened vertebrates built into Haitian National Biodiversity Strategy - Year 3 • Priority MCP activities incorporated into government and NGO annual workplans within two years of End of Project • National Steering committee established and overseeing implementation of all globally threatened vertebrate MCPs within two years of End of Project	National Biodiversity Strategy monitoring reports	
<b>Purpose</b> Improve the conservation management and status of Haiti's globally threatened vertebrates, and the integrity of the forest habitats they depend upon, within the key biodiversity area of the Massif	MCPs for globally threatened vertebrates implemented and producing monitoring data • Rate of loss of critical habitat for globally threatened vertebrates reduced/ halted • State, Pressure, Response variables gathered each year for the massif and its globally threatened vertebrates • MCPs for globally threatened vertebrates built into Haitian National Biodiversity Strategy – Year 3	MCP reports, database and GIS • Annual State, Pressure, Response reports for Massif de la Hotte and threatened vertebrates • Scientific literature • Government reports to CBD • National Biodiversity Strategy monitoring reports • Project progress reports	Close collaboration and communication between project partners • Haitian government support continues throughout project
<b>Outputs</b> 1. Evidence-base on distribution, population status, ecology and conservation requirements of globally threatened vertebrates and their habitats strengthened and disseminated	Scientifically robust baseline data for globally threatened vertebrates collated, analysed and reported – Year 1 • Baseline occupancy survey completed and GIS built and populated with data as part of a Haitian biodiversity database and clearing-house – Year 2 • Habitat suitability models, key conservation zone maps, and long-term species/ habitat resiliency plans produced – Year 2 • Long-term monitoring protocols and survey design developed and guidelines drafted – Year 2 • National MCP steering committee established • Draft MCPs for globally threatened vertebrates published, and implementation started.	Project progress and annual reports, newsletters and partner websites • Scientific literature – project publications (minimum of 3 articles submitted to peer-reviewed journals and 4 articles in IUCN Specialist Group literature) • 3 MCPs, protocols and guidelines published/ on project partner websites • Long-term species/ habitat resiliency plan for massif • Steering Committee meeting minutes • Haitian biodiversity database and clearing-house	Haitian government continues to provide permits for field research

Project summary	Measurable Indicators	Means of verification	Important Assumptions
2. Strengthened Haitian capacity (at local community, local and national levels) for conserving and monitoring globally threatened vertebrates and their habitats	Conservation and sustainable resource use agreements made between local communities and national project partners • Conservation networks of local community groups created • Local community members participate in project activities • Three participatory MCP Planning workshops held and documents published – Year 3 • Monitoring data collection protocols and experimental design developed and fully tested (and manuals written) • Cross-sectoral steering committee • Haitian biodiversity database and clearing-house established • National network of conservation practitioners and experts established – Year 2 • UK – Haiti mentoring system established	NGO–Community agreements • Community network meeting reports • Government biodiversity strategy documents • Government and NGO annual workplans • Monitoring field manuals available on project partner websites • Project annual reports • National network e-group traffic and new collaborations • Mentoring network/ e-group	Communities recognise livelihood – biodiversity link • Effective workshop facilitation • Stakeholders attend workshops • Govt and NGOs continue monitoring/ conservation support • Stakeholders participate in network
3. Skills in conservation biology, planning, advocacy and management are strengthened in local partner organisations and more widely in Haiti	Collaboration with Université Quisqueya postgrad program established • 1 Haitian conservationist receives two-year fellowship on EDGE Fellows programme, including UK training course • Minimum of 20 Haitian conservationists attend the postgraduate course run in Haiti • 1 Haitian conservationist attends DESMAN course in Jersey • 20 students from the postgrad program participate in preparation of MCP documents • Counterpart project manager leads drafting of 1 article for peer-reviewed journal, and 1+ media articles • Haitian project manager plays key role in leading MCP workshops and drafting documents • Successful skills transfer/ responsibility	Postgraduate certificates awarded by Université Quisqueya • Post-graduate DESMAN certificate awarded by University of Kent • Peer-reviewed literature • Course attendance records and feedback forms • EDGE Fellows training course and report evaluation • Project annual reports • MCP document authorship	Core project staff remain in post throughout project • Project offers appropriate training for local partner staff
4. Awareness of status and conservation needs of globally threatened Haitian vertebrates substantially improved at local, national and international level	5,000 threatened vertebrate calendars and posters produced and distributed at meetings with local communities, and in local schools • 'Informational' film on Haitian vertebrate conservation (and its relevance to sustainable-use and livelihoods) produced and broadcast on Haitian television and at local community meetings/ schools • Survey of attitudes shows improved awareness and perception of globally threatened vertebrates in communities local to project field sites during the project (baseline Year 1 compared with Year 3) • 6 national radio and TV interviews, 6 national and 1 international	Project annual reports • Radio and TV transcripts, newspaper articles, scientific papers • Project partner websites and hit-count • Awareness survey reports	Posters, calendars and film are appropriate media to influence attitudes and change perceptions/ behaviour • Media willing to publicise plight of globally threatened Haitian vertebrates

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	newspaper articles • 6 articles and regular blogs published on partner websites • Increasing number of “Haiti” hits on partner websites		

## Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

### *Checklist for submission*

	Check
<b>Is the report less than 5MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	
<b>Is your report more than 5MB?</b> If so, please advise <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> that the report will be send by post on CD, putting the project number in the Subject line.	
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number.	
Have you involved your partners in preparation of the report and named the main contributors?	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	