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

Darwin Project Information

Project Reference	19-004
Project Title	Building Capacity of the Next Generation of Liberian Conservation Professionals
Host Country/ies	Liberia
Contract Holder Institution	Fauna & Flora International (FFI)
Partner institutions	University of Liberia Forestry Development Authority Forestry Training Institute Zoological Society of London
Darwin Grant Value	£299,122
Start/end dates of project	1st April 2012 – 31st March 2015
Reporting period (eg Apr 2013 – Mar 2014) and number (eg Annual Report 1, 2, 3)	April 2013 – March 2014. Annual Report 2
Project Leader name	Dr Mary Molokwu / Dr Kathryn Shutt
Project website	http://www.liberianfaunaflora.org/FFI/Page.aspx?p=30&ix=3064&pid=3009&prcid=4&ppid=3009
Report author(s) and date	Dr Mary Molokwu (FFI) and Prof John Woods (UL) April 29 2014

1. Project Rationale

Liberia holds two-thirds of the remaining blocks of intact Upper Guinean rainforest and therefore serves as a stronghold for many globally important species. However, extensive deforestation has rendered this important biome seriously fragmented. Remaining forest sections provide critical habitat for threatened populations of many animal species, including the pygmy hippopotamus (*Choeropsis liberiensis*). One of the last significant populations of this species thrives in the Sapo National Park, Liberia's foremost protected area, which holds one of three most intact blocks of the Upper Guinea forest and is one of the single-most intact forest ecosystems in Liberia. New species are still being discovered in the Park, with 15 new plant species found in one botanical survey alone (2010). After 14 years of civil war, threats to these forests, such as logging, mining and agro-industrial crops are increasing, and are compounded by low institutional conservation capacity leading to poor forest governance.

The Forestry Development Authority (FDA), the main government institution responsible for the conservation and utilization of Liberia's forest resources lost much of its institutional capacity during the war, and to date is an aging workforce. As a result of the civil crises, little opportunity existed in country for building the capacity of natural resource managers in conservation as infrastructure for research and education were destroyed and trainings continually disrupted. Liberia's biodiversity was heavily impacted by deforestation, which increased dramatically as

uncontrolled logging and hunting pressures increased. The curriculums of institutions of learning are outdated and students have very little opportunity to gain practical experience in conservation and ecological research while lecturers lack the technical skills/knowledge to teach conservation issues or supervise research. As such, very little is known about Liberia's biodiversity, while the rate of deforestation continues to rise.

In 2011, FFI conceived a project to build the capacity of Liberia's natural resource managers in conservation. A scoping mission was conducted with funds from the UK Government's Darwin Initiative and a full project was developed and commenced in 2012 after further funding was received from the Darwin Initiative and the US Fish and Wildlife Service as well as Basel Zoo for the construction of a research centre. Both in-country and international partners were identified and involved in project planning and implementation (see section 2).

The project aims to build the capacity of Liberia's forestry professionals and students in conservation through 1) improvement of the forestry curriculums of Liberia's main academic institutions with the inclusion of conservation-based modules at international standards; 2) establishment of a centre of excellence for practical field training in conservation and ecological methods; 3) developing collaborations that will foster knowledge transfer and mentorship with international researchers. The Sapo Conservation Centre located in the headquarters of Sapo National Park in the South east region of Liberia (Fig 1) will act as a focal point for research in the south east, generating baseline information on Liberia's biodiversity. It is also anticipated that the centre's research activities will feed directly into the poverty reduction strategy of the Liberian Government through the production of urgently needed information on local livelihood strategies and sustainable utilisation of natural resources.

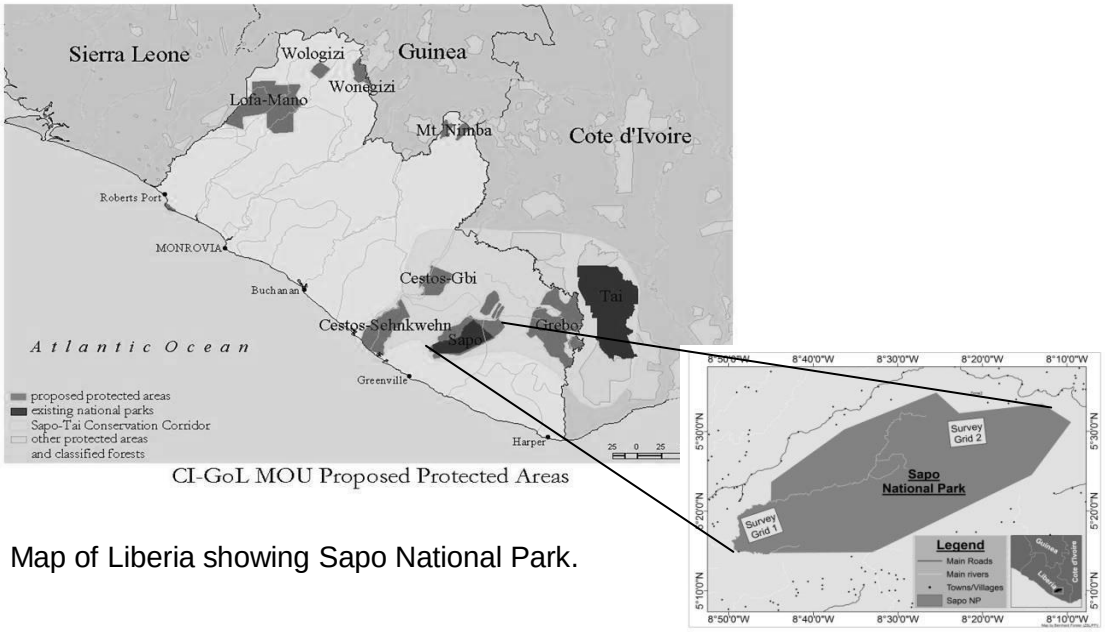

Figure: Map of Liberia showing Sapo National Park.

2. Project Partnerships

During the first year of the project, two formal UK partners (FFI and the Zoological Society of London) and three in country partners, the University of Liberia, the Forestry Development Authority (FDA) and the Forestry Training Institute (FTI) were incorporated and a Memorandum of Understanding was signed between all 5 partners. The responsibilities of all three in country partners as stipulated in the MOU include providing technical support in project design and implementation as well as staff time and use of facilities where possible. ZSL provides resource support and technical expertise in the development of the field courses and a research program. All three in-country partners are also major beneficiaries to the project in the form of training of personnel. A partnership was also formed with the University of Cambridge that includes provision of technical expertise where required.

The five main partners and three other stakeholder institutions together form members of the project steering committee with the University of Liberia as head of the committee. These

include, the Environmental Protection Agency of Liberia (EPAL), the Convention on Biological Diversity (CBD) focal point in Liberia, Liberia's Ministry of Internal Affairs (MIA) and the local community, Jalays Town, where the centre is situated. Cuttington University, the second largest university in Liberia was initially invited to sit on the committee, however, they have not had representation to date. The chair of the committee, (the head of the Forestry department of the University of Liberia) volunteered to take up the task of ensuring that a representative of Cuttington University is reached during the last Steering committee meeting on 11th March 2014. The Steering Committee, which meets at least three times a year (but upholds regular correspondence by email and phone), has the responsibility to advise, monitor and support the on-going development of the project. Other stakeholder institutions invited to observe at committee meetings include, the Society for the Conservation of Nature in Liberia (SCNL), Liberia's Ministry of Education (MoE) and Ministry of Agriculture (MoA), United Nations Development Programme (UNDP) and US Agency for International Development (USAID). Recently, a new partnership was formed with the A. P. Leventis Ornithological Research Centre (APLORI), Nigeria, as an internationally recognized institution promoting ornithological research in West Africa and offering a Masters program in Conservation Biology. An MOU was signed (see Annex 4) that includes an agreement for the training of one Liberian student, yearly, on the MSc course in Conservation Biology with a full Leventis Scholarship and the promotion of ornithological research in Liberia. 600 species of birds have been recorded in Liberia and it is believed that there are many more still to be discovered, highlighting the significance of this area of capacity building.

The steering committee has been very active, supporting project activities where possible. The opening of the newly established Sapo Conservation Centre was jointly sponsored by all in-country partners and stakeholders and due to the influence of the UL and FDA the Liberian Minister of Internal affairs was physically present to launch the centre. It is anticipated that the government institutions on the committee will help to promote project outcomes that impact on policy at both local and national levels. The committee will also ensure that project activities adhere to standards of best practice, both locally and in a wider context. For example, the FDA and EPA sent a representative to conduct an Environmental Impact Assessment at the construction site before the construction of the Centre commenced. The mix of different stakeholders will ensure that the project's scope aligns with the requirements of the various stakeholder groups. In this past year, three meetings were held on the 7th June and 2nd October 2013 and 11th March 2014. The committee has proven to be a highly effective supporting body and are currently involved in review of the Centres' developing business plan.

3. Project Progress

3.1 Progress in carrying out project activities

1. Curriculums of Liberia's premier teaching institution updated with conservation-focused teaching modules, in line with international standards. Topics to include introduction to conservation biology, rights-based governance approaches, sustainable livelihoods and climate change.

1.1. Hold inception stakeholder workshop to launch project and assess priorities for academic and field course content.

This activity was completed and reported in Year 1.

1.2. Devise and develop 6 academic modules and embed into curriculums of UL and FTI and 1.3 Produce accompanying educational packs for teachers and students

12 modules under two courses 'Biodiversity Conservation I and II were created during the first year and inserted into the curriculum of the Forestry Department of the University of Liberia. However, the curriculum has still not yet been finalized due to elaborate bureaucratic procedures. So far, information packs for seven modules have been drafted and will be reviewed by the Project Steering Committee. PowerPoint presentations of 2 hrs each have been developed for the course Biodiversity Conservation I: An introduction. These include the following topics: 'Introduction to Conservation Biology', 'What is Biodiversity' 'Threatened species and habitats', 'Measuring Biodiversity', 'Project Planning' and 'Scientific Writing'. Since

the course is not yet being taught at the University, they have been incorporated into the field course and taught at the beginning to introduce students to the principles of conservation. A teaching manual is currently being drafted for the field course modules and two manuals are planned for the biodiversity conservation courses.

1.4. Train a minimum of 6 lecturers in module implementation

The second year focused on a 'train the trainer' series for academic instructors from the University of Liberia, Forestry Training Institute and Nimba County Community College (NCCC) as well as Park wardens and biologists of the Forestry Development Authority. The training model included a three-pronged approach including, training in module development and delivery (for lecturers), training in conservation issues (for both instructors and FDA staff) as well as application of skills gained (see schematic in Annex 5). Instructors and FDA staff received both theoretical training and practical training during field courses hosted at the Sapo Conservation Centre. The 'training of trainer' workshops held included an 'Effective Communication' workshop for lecturers from 17th to 19th April 2013 at the Golden Gates hotel, Monrovia and was facilitated by Dr Chris Sandbrook from the University of Cambridge. A second workshop on Conservation Biology: 'Ecological Sampling for Conservation' was held at Corina hotel from 19th – 20th September 2013 and was facilitated by the Project Coordinator Dr Mary Molokwu. Two field courses, Ecological Sampling I and II were held at the SCC 1st – 6th June 2013 and 22nd – 28th November 2013. Evaluation of participants during and after the workshops was carried out and a follow up assessment weeks after training was done by the Project Coordinator. Two lecturers and two FDA staff were selected at the end of the training to support the field course for students as part of an evaluation to observe the instructors train students on what they had previously been taught. The training workshops were aimed at developing teaching skills, module design and implementation as well as improving capacity in the teaching of conservation and in conducting and supervising field based ecological research.

1.5. Teach conservation modules to UL and FTI students

Eleven students from UL, FTI and NCCC were trained for two weeks during the first field course for students in February 2014. Students were trained using both the academic modules and the field course modules. Since the curriculums of UL and FTI have not been finalized and the teaching of the conservation modules have not yet commenced, the Project Coordinator introduced students to the principles of conservation using the academic modules. Students were guided through an abridged version of the course *Biodiversity Conservation Module I: An Introduction*, at the beginning of the field course. Two lecturers and two FDA staff trained during the previous field courses co-facilitated the course and successfully supervised students' fieldwork.

2. Capacity of Liberian students and FDA employees in field research methods and conservation issues increased through residential courses at SNP hosted by SCC

2.1. SCC Steering Committee formed and operational

The steering committee met several times this year (see Section 2). In addition, a partners meeting was held to plan for the combined opening of the Sapo Conservation Centre and celebration of the 30th anniversary of the Sapo National Park. A planning sub-committee was instituted, made up of FDA, SCNL and FFI. The sub-committee came up with a budget which was approved by the partners and successfully carried out the planning and implementation of the ceremony. All four in-country partners and one of the steering committee members, SCNL were actively involved in the planning and were individually assigned tasks ranging from circulating invitations, arranging refreshments, transport and accommodation for guests to organizing entertainment and awards. The occasion was highly publicized within Liberia and a news story was published on the FFI website http://www.fauna-flora.org/news/sapo-conservation-centre-opens-in-liberia/. Also, during the year, two sub-committees were formed to review the business plan and to oversee the development of a collaborative research proposal

on the Endangered West African Manatee *Trichechus senegalensis* that will be led by the University of Liberia (UL) and supported by FFI, SCNL and a new collaborator, Florida International University (FIU).

2.2. Production of SCC business plan

The recommendation made by the sub-committee assigned to review the business plan, made up of USAID, SCNL and FFI, was that the business plan should be redrafted to better reflect a financial sustainability plan for the Centre. The Project Coordinator was given the task of sourcing for the assistance of a business management expert to support the drafting of the business plan. A member of the Conservation Capacity team in FFI Cambridge was approached and the Project Coordinator was taken through a short course on Financial Sustainability (FS). Thereafter a mini-workshop was organized within FFI to develop a FS plan for the Sapo Conservation Centre. Those who participated in the one-day mini-workshop organized by the Project Coordinator on the 20th of March 2014 included FFI's UK Programme Coordinator, West Africa, FFI Liberia Administration and Finance team and FFI Liberia Capacity building Coordinator. A second mini-workshop is planned to finalize the FS planning.

2.3. Construct and equip research centre and campsite

The Centre has now been completed and was launched on the 8th of June 2014, in the first quarter of Year 2. Several dignitaries were invited from Monrovia and around Sinoe County, where the centre is located. The occasion held at the SCC premises drew people from different sectors and both national and local government authorities were well represented. The keynote address was taken by the Minister of Internal Affairs, Hon. Morris Dukuly and several speeches were given by County Superintendents, FDA management, USAID, SCNL, FFI and community representatives. The opening ceremony, which was combined with the 30th anniversary of the Sapo National Park, included a school pygmy hippopotamus sculpture competition and cultural display by a Wild Chimpanzee Foundation trained cultural drama troupe (see photos in Annex 6). The programme was culminated by a football match between two local communities, Jalays Town and Balibokree Town. Press releases were published in a national newspaper the Informer by FDA http://allafrica.com/stories/201306121632.html and a national magazine, the Liberia Economic Journal by FFI (see Annex 7). The news was also published on the FFI website http://www.fauna-flora.org/news/sapo-conservation-centre-opens-in-liberia/. The Centre is made up of an office building, with four offices and a lecture hall, a manager house and a campsite with tents mounted on platforms for accommodation (see photos in Annex 8).

2.4. Adapt ZSL field courses for Liberian situation and priorities

Two field course modules in Ecological Sampling (I and II) have been created, adapted from the ZSL Mongolia field course and the FFI Cambodia MSc course. These include the following topics: Introduction to Ecological Sampling, Species Identification, Equipment Use and Care, Field Craft and Camping, Navigation and Mapping, Basic First Aid, Use and Adaptability of Data sheets, Project Planning, Scientific Writing and Introduction to Data Analysis. Most of the topics are practical and largely field based. Furthermore, participants are expected to conduct mini projects in groups, analyse data collected from the field, present results and write a report. Six PowerPoint presentations of 1 hour each have also been produced for the field course and a teaching manual is being prepared.

2.5. Conduct field courses in field research methods and conservation issues

During the past year, three field courses were hosted at the Sapo Conservation Centre. The first two courses, five days each, were designed for academic instructors and FDA staff who would support subsequent trainings for students. These courses were facilitated by a consultant Dr Temidayo Osinubi from Birdlife International. The first course (Module I) was held from 1st to 6th June 2013 and the second (Module II) from 22nd to 28th November 2013. Based on experiences from the first two field courses and recommendation from participants, the course is now designed to become a two week course combining Modules I and II. The third

field course was the first designed for students and combined both modules. The course, facilitated by the Project Coordinator and supported by FFI's Senior Programme Manager, Richard Sambolah, two lecturers and two FDA staff, was held for two weeks from 1st to 14th February 2014. The course was supported by funding from the U. S. Fish and Wildlife Service obtained in 2013. A third Module 'Sustainable Livelihoods and Participatory Approaches to Conservation' is being planned.

3. Improved knowledge of the biodiversity of Southeast Liberia through increased collaborative research and continuation of SNP bio-monitoring programme.

3.1. Conduct an in-depth review of current understanding of SNP's biodiversity and identify knowledge gaps

A review of past and potential future research work in SNP was produced in Year 1.

3.2. Design and produce SCC promotional material aimed at international researchers, including posters, leaflets and webpage

A webpage has now been created for the Centre. Two posters targeted at Liberian and international researchers and a postcard (see Annex 9) have been produced and are being circulated within Liberian institutions and among international universities and research institutes. A publicity email has also been drafted for circulation using mailing list servers, and also targeting individual researchers. A professor at Lund University, Sweden has contacted the Project Coordinator and has developed a funding proposal to work in SNP in 2015.

3.3. Clear and map a trail system in the park for use by researchers, rangers and tourists

This activity has now commenced in the Sapo National Park (SNP) and is being conducted by the biomonitoring team, with support from the U. S. Fish and Wildlife Service (USFWS; see 3.4. below for more details on the biomonitoring programme). Several trails will be mapped across the park using GPS, however impacts of human disturbance will be put into consideration while selecting trails for use by researchers and tourists. For example, areas important to wildlife such as breeding sites, will be avoided as much as possible. Information on such important sites will be documented during biomonitoring data collection.

3.4. Continuation and growth of SNP bio-monitoring programme

After the first training in 2012, there was no funding to commence biomonitoring activities for over a year. However, in August 2013, funding was secured from the USFWS and the biomonitoring programme recommenced in February 2014. The FDA biomonitoring team (three FDA employees and 15 auxiliaries) were given a refresher course on data collection using the Biomonitoring training manuals produced in 2012. The team underwent two weeks of training and planning of fieldwork and commenced biomonitoring activities on the 24th of February 2014. There are indications that some of the current auxiliaries will be retained as permanent staff in the near future. For now, fieldwork will be carried out during dry and rainy seasons in 2014 and 2015. Data will be collected on 50 indicator species, including the four endangered species found in the park – pygmy hippopotamus, West African chimpanzee, Jentink's duiker and red colobus monkey. A Technical Assistant for SCC, Matthew Varney has been recruited with the main responsibility of coordinating the biomonitoring programme.

3.5. Host national and international researchers to conduct applied research work in areas of identified need

Several Liberian students were supported to carry out independent research this year. As part of a collaborative agreement with the APLORI, Nigeria in an MOU signed in June 2013, a Liberian student and graduate of UL, Benedictus Freeman is undergoing a fully funded Masters Programme in Conservation Biology at the institute in Nigeria. The student is being supported by APLORI to conduct a thesis titled 'Bird-habitat relationships and effects of anthropogenic activities in and around Sapo National Park, Liberia' starting in April 2014.

Another UL graduate, John Kannah, an intern under this project, is supported by funding from the Arcus Foundation and Henry Doorly Zoo obtained in 2013, to conduct a 6-month bushmeat survey and conservation education for schools around SNP. The proposal was first drafted by former interns who have now secured employment elsewhere (see Section 3.3 below and proposal in Annex 10). The project commenced in March 2014. John Kannah has also obtained a scholarship to attend the Tropical Biology Association course in Tanzania in August 2014. In addition, another graduate of the University of Liberia, Harnon Garbo was supported in proposal writing and she has successfully obtained a Rufford Small Grant for Nature Conservation for an awareness programme on the West African Manatee in Lake Piso Multiple Use Reserve, one of Liberia's protected areas. The funding will also support the commencement of the first biomonitoring programme in the reserve.

3.6. Establishment of a small library of books, papers and reports relevant to the study and conservation of Liberian biodiversity

A reference library of over 55 books and 40 Oryx (FFI journal) volumes has been established at the FFI office in Monrovia. Several donations were received from Arcelormittal Liberia, Dr Chris Sandbrook of the University of Cambridge and Prof Carel Jongkind of the University of Wageningen, The Netherlands, co-author of the book 'Woody Plants of West Africa'.

3.7. Train a minimum of 10 community members in basic guiding skills

Two 3-day training courses were held during this past year for community members at the Sapo Conservation Centre. Participants were trained on field guiding skills with the aim of becoming field assistants for researchers who would carry out research work at the SNP. The training was conducted by FDA Park wardens with limited supervision from the Project Coordinator. The first training course was held in June 2013 and the second, supported by the Arcus Foundation and a follow up of the first course, was held in March 2014. The same participants were trained. Topics included, 'The Role of a field assistant', 'Ecology', 'Indigenous Knowledge', 'Ethics and Behaviour in the Field', 'Choosing, Setting up and Managing the Camp', 'Equipment use, Handling and Operation', 'Use of Maps', 'Introduction to Datasheets'.

4. Research findings disseminated through local and national media, scientific publications, a dedicated webpage and reports

4.1 Produce monthly and annual reports for SCC

Quarterly and annual reports were produced for FFI and progress reports were submitted to the project steering committee.

4.2 News features and radio broadcasts released nationally

Several press releases were produced this past year, including press releases on the 'Effective Communications' workshop in the local newspaper 'The Daily Observer' and the launching of the Sapo Conservation Centre in the newspaper 'The Informer' and the widely read magazine 'Liberian Economic Journal' (see Annex 7). A report was also published on the FFI website http://www.fauna-flora.org/news/sapo-conservation-centre-opens-in-liberia/.

4.3 Research reports/publications posted on www.liberianfauna-flora.org and 4.5 Establish dissemination network

Research reports produced under this project are being posted on the website.

4.4. Conferences/Seminars attended to present research work

No conferences were attended during the past year, however, the Project Coordinator made a presentation to the steering committee on progress of the project's activities.

3.2 Progress towards project outputs

1. Curriculums of Liberia's premier teaching institution updated with conservation-focused teaching modules, in line with international standards. Topics to include introduction to conservation biology, rights-based governance approaches, sustainable livelihoods and climate change.

Indicators:

1.1) 6 academic modules written and formally included in the curriculums

In Year 1, 12 academic modules were created and included in the curriculum of the Department of Forestry, University of Liberia.

1.2) A minimum of 6 lecturers trained in module implementation

In Year 2, a total of 20 lecturers involved in module development received training during 2 training workshops on 'Effective Communication' (14 instructors) and 'Conservation biology – Ecological Sampling for Conservation' (11 instructors).

1.3) Accompanying educational packs produced for teachers and students

Of the 12 academic modules created, seven modules have been developed with information for students. In addition, six 2hr PowerPoint presentations have been developed for the teaching of the first Biodiversity Conservation course.

Means of verification:

Course modules and educational packs– information packs drafted for seven modules; six PowerPoint presentations available.

Report on 'train the trainer' workshop for lecturers produced – two reports available.

2. Capacity of Liberian students and FDA employees in field research methods and conservation issues increased through residential courses at SNP hosted by SCC

Indicators

2.1) Financially sustainable and effective functioning of newly established SCC.

Two centre buildings and a campsite have been completed and are now fully operational. Four staff have been employed including a Technical Assistant for biomonitoring, Project Assistant for bushmeat surveys, Caretaker and Gardener. The business plan drafted in Year 1 has been reviewed and is now being revised. One workshop was held to develop the business plan.

2.2) SCC hosts minimum of three 5 day workshops per year.

Three field courses were held during Year 2 - two 5-day field courses for lecturers and FDA staff and one two-week course for students.

2.3) Capacity of a minimum of 60 UL students, 60 FTI students and 30 FDA employees built in field research methods and conservation issues

The curriculums of UL and FTI are still not finalized and teaching of the modules have not commenced. However, 11 UL students were trained during the field course and one UL graduate has received training under the internship scheme. Seven FDA employees were trained during the field course and 18 FDA staff and auxiliaries were trained on biomonitoring.

Means of verification:

Monthly and annual reports produced by SCC, Sustainability plan; minutes of SCC steering committee – quarterly and annual reports and minutes of meetings available. ***Attendance lists; Pre- and end-of-project questionnaires distributed to course attendants; Accompanying educational packs produced –*** field course reports, including a video report, compilation of students' mini project reports (see Annex 11) and six PowerPoint presentations are available. Feedback forms and M & E questionnaires (Annex 12) are also available.

3. Improved knowledge of the biodiversity of Southeast Liberia through increased collaborative research and continuation of SNP bio-monitoring programme.

Indicators

3.1) No. of research projects focussed on biological diversity in Southeast Liberia increased, including proportion produced by Liberian nationals

Two research proposals one on avian diversity of SNP and another on bushmeat consumption and knowledge of SNP's protected species were developed by Liberian students. The bushmeat survey is currently being conducted.

3.2) Continuation and growth of SNP bio-monitoring programme Biomonitoring has commenced fully.

3.3) No. of community members trained in basic guiding skills

Ten community members were trained in two workshops on field guiding skills.

Means of verification:

Research reports/publications / 3.2 Annual SNP bio-monitoring report / 3.3. Monthly and annual project reports – Project proposals for avian survey and bushmeat survey (see Annex 10) around SNP available. Quarterly and annual reports available.

4. Research findings disseminated through local and national media, scientific publications, a dedicated webpage and reports

Indicators

4.1) A minimum of 2 national and 1 international press releases and/or radio interviews to be released per year

Three news features, one on the Effective Communication workshop and two on the opening of the Sapo Conservation Centre were produced and are available.

Means of verification:

Monthly and annual reports produced by SCC – quarterly and annual reports are available;
National and International publications – three news articles are available.
Research reports/publications posted on www.liberianfauna-flora.org – reports from Year 1 have been posted on the website.

While our output level assumptions still hold through, one main change has been encountered:

i) ***Lecturers are available for training and module implementation***.

While instructors from partner academic institutions have participated with keen interest in learning to teach the conservation modules, the actual likelihood of UL lecturers being available to teach the modules is low as most lecturers work part time and already have other courses to teach per semester. In response to this problem, a graduate of UL is now being trained on a one year MSc program in Conservation biology and will be expected to support the project in implementing the modules at the University after his training in September 2014. He will receive further training in module implementation and teaching skills under this project.

3.3 Progress towards the project Purpose/Outcome

Purpose: To build capacity in participatory conservation and applied research to international standards in the next generation of Liberia's conservation professionals through enhanced university education, practical field experience and mentoring from international researchers, whilst simultaneously generating baseline information on Liberia's biodiversity.

The project is well placed to achieve its purpose by end of funding as most of its objectives have been met. The following indicators were identified during the planning of the project and remain sufficient for measuring progress and achievement of the project outcomes:

1) Number of students participating in new conservation modules and field courses.
2) Number of students choosing conservation-related careers
3) Number of research projects conducted at SCC.
4) Application of learning by FDA course attendants during the course of their work

Academic modules with conservation-related topics have been inserted into the University curriculum, not just as topics but as a new course, 'Biodiversity Conservation'. A series of conservation related training workshops have been organized with full participation of forestry professionals, academics and students. Those trained have shown an increased understanding of conservation and developed research skills. Instructors and FDA staff trained during the

'training of trainer' workshops successfully supported the training of students and community members – both in theoretical issues and practical fieldwork. During the field courses for trainers and students, short research projects were conducted and scientific reports were produced by participants who also presented their findings. There has been an increase in successful applications for conservation-related jobs, grants and scholarships. In 2013 alone, two interns David Carl and Tiecanna Jones secured full time positions as biodiversity officers in Arcelormittal, a mining company and Golden Veroleum, an oil palm company, respectively. Two grant proposals were developed and three applications for Masters Programmes and short courses were made. One grant proposal was successful; the other is yet to be submitted. Two scholarship applications were successful (see section 3.1. subsection 3.5). Interns mentored are fully involved in the project and a research project is being implemented in SNP. In addition, biomonitoring has commenced in the Park by fully trained FDA staff.

3.4 Goal/ Impact: achievement of positive impact on biodiversity and poverty alleviation

The overall goal of this project is to contribute to the conservation of Liberia's biological diversity, and Sapo National Park in particular, by drawing on UK expertise to build national capacity to meet international and national biodiversity targets.

Our project has tapped on expertise from the University of Cambridge, the Zoological Society of London and FFI Cambridge to establish a training scheme for local partners that will build individual and organizational capacity in the conservation of Liberia's rich biological diversity and sustainable use of natural resources. A biodiversity conservation course has been created at the University and a conservation centre for training and research has been established and research activities commenced. While there might be no immediate measurable impact of the project on biodiversity, the project is well posed to provide relevant baseline information on the status of biodiversity in the Sapo National Park (SNP). The project's capacity building model that combines theoretical and practical training, mentorship and research sets the stage for the generation of important data for proper management of globally important biodiversity (for the project's impact on poverty alleviation see section 5).

4. Project support to the Conventions (CBD, CMS and/or CITES)

By strengthening the capacity of Liberian nationals the project supports the National Government of Liberia in implementing Articles 5, 7, 8, 10, 11, 12, 13, 17 and 18 of the Convention on Biological Diversity (CBD). This project has particularly supported the implementation of *Article 12. Research and Training* through the establishment of the Sapo Conservation Centre and *Article 18. Technical and Scientific Cooperation* through collaborations developed with regional and international institutions (see Annex 4). Such collaborations and programmes for scientific research and training will increase technical capacity for the conservation of Liberia's biodiversity. By supporting and co-coordinating research efforts, the project addresses serious knowledge gaps on Liberia's biodiversity, enabling informed management decisions to be made and enabling more accurate future monitoring of the 130 CITES listed species found in the country, including the African Elephant, directly contributing to the conservation and sustainable use of biodiversity. The EPA, Liberia's CBD focal point is an active member of the Project Steering Committee that meets three times a year (minutes of meetings are available).

5. Project support to poverty alleviation

The project addresses poverty alleviation both directly and indirectly. Community members will benefit from training in sustainable livelihood approaches and from long- and short- term employment as a result of activities of the centre. This is expected to influence poverty in several ways: 1) training would result in increased awareness and sustainable use of forest resources as well as diversification of livelihood options, 2) income through employment will reduce poverty and contribute to reduced over-dependence on forest resources. In total, about 17 local people are benefitting from this project. 15 FDA auxiliaries, all from the surrounding

communities are now being paid for biomonitoring work and two community members have been employed at the centre on a long-term basis. Community members who are being trained on field guiding to support researchers who would conduct research work in the Park will receive remuneration in the future. During short courses at the centre local women are recruited to provide services such as catering and laundry. This has increased support for the project in the local community. For example, a local woman hinted that children are usually happy when the centre is hosting a field course as their mothers are able to cater for their immediate needs, including materials for school, from their earnings.

6. Monitoring, evaluation and lessons

The project is constantly being monitored by FFI through annual and quarterly reports detailing achievements to date, monthly objectives and any difficulties encountered. Progress reports are also presented to the Project Steering Committee at every meeting. Indicators of achievement set at the beginning of this project include, number of students, lecturers and FDA staff trained in theoretical and practical conservation issues; number of modules, educational packs and manuals produced; degree to which research outputs are integrated into natural resource management decisions; application of learning by FDA course attendants during the course of their work and number of research projects being conducted by Liberian nationals as well as number of students who choose conservation-related careers.

Actual project activities and outputs are regularly matched against the project logframe to ensure that originally proposed objectives are being met. Detailed annual technical and financial reports are produced, reporting against objectives and the budget. Self-assessment questionnaires are distributed yearly to instructors and FDA personnel to collect information on baseline and mid- and after- project developments to measure the impact of this project. An M & E questionnaire (Annex 12) was designed during the first year to evaluate the impact of the project on students who will undergo training during the project each year. Graduates of UL and FTI are interviewed to gather information on their knowledge of conservation and to get a view of how many graduates of forestry choose conservation related careers. Pre- and post- project questionnaires will be compared at the end of the project to measure its success. Participants are also constantly evaluated through on the ground application of skills gained.

Lessons learned

Our approach to strengthening technical capacity in conservation in Liberia combines academic and practical training with mentorship. One strong element of this initiative includes the focus on a ‘train the trainer’ approach. This was originally planned to be a one-time activity, however, a training needs assessment revealed that academic instructors and FDA field team leaders required more training on conservation-related issues. Over the last two years, academic instructors have been trained to implement the academic and field modules and will receive on-going support from the project. Similarly, FDA Park Wardens have been trained and supported to engage in training at the community level. This form of capacity building results in a ripple effect of knowledge transfer while at the same time engaging trainees to independently apply the knowledge gained and improving their skills. Our project therefore involves continuous evaluation of our activities through on the ground application by trainees of skills acquired. During the trainings, it was discovered that skills in data analysis are largely lacking among academic instructors and FDA staff, resulting in limited capacity to present findings of research conducted and no publications from the university. A data analysis course is now being planned for Year 3. Another essential aspect of this initiative is the formation of collaborations with international institutions. Research and academic networks created, particularly with regional institutions that will lead to efficient knowledge transfer and promote collaborative research on a sustainable basis even after the life of this project and long after FFI withdraws from the area.

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

All comments from the review of our Year 1 report were duly noted and recommendations effected during Year 2. The use of the modules for teaching of UL and FTI students in Year 1 was not possible because the curriculum were not finalized. Despite that, in Year 2, during the field course, students were trained using the academic and field course modules.

Before the training for the biomonitoring team this year, an assessment of previous knowledge was carried out. The Project Coordinator asked participants questions from the biomonitoring training manual, for example: *What is an indicator species? Why do we carry out monitoring*? During the practical sessions, they were also tested on identification skills and data collection and recording protocol for example, measuring distance from chimpanzee nests, data recording using datasheets. While they had excellent identification skills (as most were former hunters), it was obvious from poor responses to knowledge questions and limited ability to record data that an intensive refresher course was necessary to bring the teams up to speed. After a one week refresher, participants were tested again in the field and this time showed significant improvement in data recording and knowledge of conservation issues (report is in preparation).

The disappearance of the driver after the project vehicle was hijacked led to the suspicion that he was involved in the theft. We have put in place stricter employment checks and have acquired a tracking device for the new vehicle purchased with funds from Arcus Foundation.

8. Other comments on progress not covered elsewhere

Several new developments have evolved during the second year of this project. Firstly, collaboration is being discussed between SCC, UL and Florida International University (FIU) that will entail the conception of an exchange programme between Liberian students and FIU students. This exchange programme is anticipated to be in the form of a three-week Tropical Ecology training course that will foster knowledge transfer between Liberian students and their FIU counterparts. Furthermore, at the end of the first field course in June 2013, instructors came together and formed a new association, 'Inter-College Conservation Union'. This was based on their desire to receive guidance in developing a multi-disciplinary research project that will involve all four participating organizations (UL, FTI, NCCC and FDA) and incorporate their various skills and trainings. It was a welcome initiative and can be considered a significant and unexpected output from the project. Lastly, the curriculums of UL and FTI have still not been finalized, meaning that the academic modules may not be taught before the end of the project. A seminar series is now being planned for Year 3, where UL and FTI students will be given lectures using the conservation modules.

9. Sustainability

The project has been promoted through the distribution of posters and postcards, press releases and presentations. The Project Coordinator gave a talk at the launching of the biodiversity club of the Forestry Department University of Liberia that increased awareness and students' interest in the project. The Biodiversity club coordinator, a lecturer at the University of Liberia reported a high level of interest among students to sign up for the SCC field course, and two biodiversity club members expressed interest in the internship programme. This suggests that student interest throughout the life of the project and after will be retained.

A 5-year financial sustainability plan is now being developed for the project as an outcome of a review of the SCC business plan drafted in Year 1. This would form the mode of operation of the centre. So far, a strong technical team has been established at SCC, with the Project Coordinator as the head of the Centre and a Technical assistant coordinating biomonitoring activities. A project assistant has also been recruited to support the Technical Assistant in creating environmental awareness among communities around the reserve and developing research activities in SNP. The student being trained in the APLORI Conservation Biology Masters programme will return at the end of his course, to support the teaching of the academic modules. Training and research collaborations with UK based and regional institutions, particularly the training of one Liberian every year in Conservation Biology will ensure that research activities and technical capacity development continues even after the project ends.

10. Darwin Identity

Darwin is a major funder of this project and has been acknowledged as such. The Darwin logo was used throughout the project on publicity materials - posters and postcards and letters of invitation (see Annexes). Stickers of the logo or serial numbers with the DAR code were placed on equipment purchased for the centre (see Annexes for some examples). The Darwin initiative was also largely recognized during the launch of the Sapo Conservation Centre and the logo was boldly displayed on the publicity banner (see Annex 6). All local partners – the University and government institutions as well as international partners are very familiar with the role of the Darwin Initiative as the main funder of the project and the project is usually referred to as the 'Darwin Project'.

11. Project Expenditure

Table 1 project expenditure <u>during the reporting period</u> (1 April 2013 – 31 March 2014)

Project spend since last annual report	2013/14 Grant (£) (Original budget + agreed carryover from year 1 incl. budget amendments <10%)	2013/14 Total actual Darwin Costs (£)	Balance	Variance %	Comments
Staff costs (Specified by individual)					
Mary Molokwu					
Caretaker Centre of Excellence					
Project Driver					
C. Hodgkinson/K.Shutt					
Richard Sambolah					*£150 of budget moved to travel and subsistence
Consultancy costs					
Overhead Costs					
Travel and subsistence					£150 of budget moved from Richard Sambolah (staff)
Operating Costs					
Capital items (see below)					
Others (Consumables)					£50 of budget moved to office equipment
Others Carbon offsetting					Largest variation although against smallest budget
Others (Office equipment)					£50 of budget moved from Consumables
TOTAL					

*Richard Sambolah replaced Chris Ransom and Chris Sandbrook for this year's field and community guiding course as approved via a Darwin change request.

Highlight any agreed changes to the budget and explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin?

12. 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 the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

The Sapo Conservation Centre in Liberia is now established and fully operational and residential field courses have commenced. The establishment of a Centre of Excellence for field training, and partnerships formed with international institutions has created a fantastic opportunity for Liberian forestry professionals and students to gain practical experience in conservation and ecological research and for trainers to develop their skills/knowledge in the teaching of conservation issues. In addition, more extensive training in conservation was identified as necessary for more effective implementation of the conservation course at the university. To this effect, an MOU was signed with the A. P. Leventis Ornithological Research Institute (APLORI) Nigeria to train one Liberian student a year on the Masters programme in Conservation Biology. The first student will be completing his programme in 2014. This is another step towards achieving the main purpose of this project, which is to build local capacity in participatory conservation and applied research to international standards.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2013-2014

Project summary	Measurable Indicators	Progress and Achievements April 2013 - March 2014	Actions required/planned for next period
Goal/Impact 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. **Sub-Goal**: To contribute to the conservation of Liberia's biological diversity, and Sapo National Park in particular, by drawing on UK expertise to build national capacity to meet international and national biodiversity targets.		There are indications of progress towards positive impact on biodiversity. The project is well posed to provide relevant baseline information on the status of biodiversity in the Sapo National Park (SNP). Research on bushmeat consumption and impacts of hunting on protected species is on-going and the commencement of biomonitoring in the Park creates opportunity for gathering data that will be used to monitor changes in species populations and threats facing these species. In addition, community members benefit from training in field skills and from long- and short- term employment as a result of activities of the Centre.	[redacted]
Purpose/Outcome To build capacity in participatory conservation and applied research to international standards in the next generation of Liberia's conservation professionals through enhanced university education, practical field experience and mentoring from international researchers, whilst simultaneously generating baseline information on Liberia's biodiversity.	1) Number of students participating in new conservation modules and field courses. 2) Number of students choosing conservation-related careers 3) Number of research projects conducted at SCC. 4) Application of learning by FDA course attendants during the course of their work	Considerable success was achieved during Year 2. Most project objectives were met as shown by progress indicators. There has been strong interest in the project among students and lecturers as well as FDA staff. So far 11 students, 20 lecturers and six FDA staff have been trained using the academic and field course modules. At least two interns trained in Year 1 gained employment as biodiversity officers in natural resource management organizations. One student will be completing an MSc in Conservation Biology and two research projects are being conducted in SNP by Liberian nationals. 18 FDA staff have been trained and have commenced biomonitoring activities in SNP.	Key activities planned for Year 3 include: 1. Three field courses organized and academic modules and training manuals completed; 2. FTI students and UL Biodiversity Club trained during a seminar series, using the academic modules; 3. Biomonitoring continued and data collected analysed; 4. Training of instructors and research students on proposal writing and data analysis; 5. Manuscripts on research projects written and submitted in peer-review journals;

			6. SCC business plan finalized.
Output 1. 1. Curriculums of Liberia's premier teaching institution updated with conservation-focused teaching modules, in line with international standards. Topics to include introduction to conservation biology, rights-based governance approaches, sustainable livelihoods and climate change	1.1) 6 academic modules written and formally included in the curriculums 1.2) A minimum of 6 lecturers trained in module implementation 1.3) Accompanying educational packs produced for teachers and students	Based on the progress indicators, this output has been achieved to a great extent and will be completed in Year 3.	
Activity 1.1 Hold inception stakeholder workshop to launch project and assess priorities for academic and field course content.		This activity was successfully completed in Year 1.	
Activity 1.2, Devise and develop 6 academic modules and embed into curriculums of UL and FTI		This activity was fully achieved with output beyond what was originally planned. 12 instead of 6 modules were developed and inserted into the UL curriculum as two Biodiversity Conservation courses I and II.	
Activity 1.3, Produce accompanying educational packs for teachers and students		Seven out of 12 educational packs have been developed. The remaining five and training manuals will be completed in Year 3.	
Activity 1.4, Train a minimum of 6 lecturers in module implementation		So far 20 lecturers have been trained in module implementation and conservation issues. Of this, six lecturers were given intensive training in practical field skills.	
Activity 1.5, Teach conservation modules to UL and FTI students		11 students of UL and FTI were trained in Year 2. Pending the finalization of the curriculum of the two institutions, students will be taught during a seminar series in Year 3 using the academic modules.	
Output 2. Capacity of Liberian students and FDA employees in field research methods and conservation issues increased through residential courses at SNP hosted by SCC	2.1) Financially sustainable and effective functioning of newly established SCC. 2.2) SCC hosts minimum of three 5 day workshops per year. 2.3) Capacity of a minimum of 60 UL students, 60 FTI students and 30 FDA employees built in field research methods and conservation issues	Most of the activities under this output have been completely carried out but remain on-going throughout the project. The indicators remain appropriate in measuring progress	
Activity 2.1. SCC Steering Committee formed and operational		The Steering Committee was formed in Year 1 and is fully active, with meetings held at least three times a year. Four meetings were held in Year 2.	

Activity 2.2. Production of SCC business plan		The business plan was drafted in Year 1, was reviewed in Year 2 and is now being revised. To be finalized in Year 3.
Activity 2.3. Construct and equip research centre and campsite		This activity has been fully achieved. An office building, a manager house and campsite have been completed.
Activity 2.4. Adapt ZSL field courses for Liberian situation and priorities		This activity has been fully achieved.
Activity 2.5. Conduct field courses in field research methods and conservation issues		Three field courses were hosted at SCC during Year 2 and will remain a yearly activity.
Output 3. Improved knowledge of the biodiversity of Southeast Liberia through increased collaborative research and continuation of SNP bio-monitoring programme.	3.1) No. research projects focussed on biological diversity in Southeast Liberia increased, including proportion produced by Liberian nationals 3.2) Continuation and growth of SNP bio-monitoring programme 3.3) Number of community members trained in basic guiding skills	All seven activities under this output were conducted, while remaining an on-going process. Indicators remain appropriate measures of project progress
Activity 3.1 Conduct an in-depth review of current understanding of SNP's biodiversity and identify knowledge gaps		This activity was completed in Year 1. Future research activities in SNP will target priorities identified during the review.
Activity 3.2 Design and produce SCC promotional material aimed at international researchers, including posters, leaflets and webpage		Posters and postcards have been produced. Two kinds were produced, targeted at national and international researchers. These are now being circulated. Publicity emails have also been sent out to mailing lists and individual researchers.
Activity 3.3 Clear and map a trail system in the park for use by researchers, rangers and tourists		This activity has now commenced and is being conducted by the biomonitoring team.
Activity 3.4. Continuation and growth of SNP bio-monitoring programme		A refresher course was conducted and biomonitoring activities have now commenced. It will remain a yearly activity.
Activity 3.5. Host national and international researchers to conduct applied research work in areas of identified need		Two national researchers are now carrying out research work at the SNP
Activity 3.6. Establishment of small library of books, papers and reports relevant to the study and conservation of Liberian biodiversity		A reference library containing 55 books and 40 journals have now been established
Activity 3.7. Train a minimum of 10 community members in basic guiding skills		Two 3-day trainings were conducted for community members during Year 2.
Output 4. Research findings disseminated through local and national media,	4.1) A minimum of 2 national and 1 international press releases and/or radio interviews to be released per year	This output has been completely achieved; however it remains a continuous activity.

scientific publications, a dedicated webpage and reports.		
Activity 4.1 Produce monthly and annual reports for SCC		Quarterly and annual reports produced and circulated
Activity 4.2 News features and radio broadcasts released nationally		Three press releases were featured in three national newspapers and one news story was featured internationally on the FFI website that was shared in social media such as Facebook
Activity 4.3 Research reports/publications posted on www.liberianfauna-flora.org		Reports produced in Year 1 available on the website
Activity 4.4 Conferences/Seminars attended to present research work		No conferences were attended this year, however, the Project Coordinator presented project activities during the last Steering Committee meeting of the Year.
Activity 4.5 Establish dissemination network		Dissemination network has been established.

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal: 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.			
Sub-Goal: To contribute to the conservation of Liberia's biological diversity, and Sapo National Park in particular, by drawing on UK expertise to build national capacity to meet international and national biodiversity targets.	1) The extent and quality of information available on the characteristics, uses and values of the biodiversity of Liberia 2) The degree to which research outputs are integrated into natural resource management decisions (incl. SNP) 3) A significant contribution made to Liberia's National Biodiversity Action Plan.	1) Data available on the characteristics, uses and values of Liberia's biodiversity 2) National and regional conservation strategies/policies/laws; Meeting minutes; Reports 3) Project reports (annual and final)	[redacted]
Purpose To build capacity in participatory conservation and applied research to international standards in the next generation of Liberia's conservation professionals through enhanced university education, practical field experience and mentoring from international researchers, whilst simultaneously generating baseline information on Liberia's biodiversity.	1) Number of students participating in new conservation modules and field courses. 2) Number of students choosing conservation-related careers 3) Number of research projects conducted at CEERCL. 4) Application of learning by FDA course attendants during the course of their work	1a) University registration records 1b) CEERCL annual reports 2) Post-project follow-up questionnaire to course attendants 3) Research reports/publications 4) Pre and end-of-project questionnaires to FDA course attendants and discussion with line managers	Facilities, lecturers and students available. National and international researchers attracted to the area. Political stability maintained nationally and regionally UoL, FDA and FTI remain operational.
Outputs 1. Curriculums of Liberia's premier teaching institution updated with conservation-focused teaching modules, in line with international standards. Topics to include introduction to conservation biology, rights-based governance approaches, sustainable livelihoods and climate change	1.1) 6 academic modules written and formally included in the curriculums 1.2) A minimum of 6 lecturers trained in module implementation 1.3) Accompanying educational packs produced for teachers and students	1.1) Course modules and educational packs available 1.2) Report on 'train the trainer' workshop for lecturer produced	Lecturers available for training and module implementation. Sufficient students signing up for modules. Appropriate facilities available within the teaching institution.

2. Capacity of Liberian students and FDA employees in field research methods and conservation issues increased through residential courses at SNP hosted by CEERCL	2.1) Financially sustainable and effective functioning of newly established CEERCL. 2.2) CEERCL hosts minimum of three 5 day workshops per year. 2.3) Capacity of a minimum of 60 UL students, 60 FTI students and 30 FDA employees built in field research methods and conservation issues	2.1; 2.2) Monthly and annual reports produced by CEERCL; Sustainability plan; minutes of CEERCL steering committee. 2.3) Attendance lists; Pre and end-of-project questionnaires to course attendants; Accompanying educational packs produced	Lecturers/teaching support staff available for field course implementation. Sufficient students signing up for workshops. Active participation of students
3. Improved knowledge of the biodiversity of Southeast Liberia through increased collaborative research and continuation of SNP bio-monitoring programme.	3.1) No. research projects focussed on biological diversity in Southeast Liberia increased, including proportion produced by Liberian nationals 3.2) Continuation and growth of SNP bio-monitoring programme 3.3) Number of community members trained in basic guiding skills	3.1) Research reports/publications 3.2) Annual SNP bio-monitoring report 3.3) Monthly and annual project reports	National and international researchers attracted to area; Researchers are capable of carrying out and completing research work in logistically challenging areas. Community interest in learning guiding skills to diversify income through guiding researchers and tourists.
4. Research findings disseminated through local and national media, scientific publications, a dedicated webpage and reports.	4.1) A minimum of 2 national and 1 international press releases and/or radio interviews to be released per year	4.1) Monthly and annual reports produced by CEERCL 4.2) National and International publications 4.3) Research reports/publications posted on www.liberianfauna-flora.org	Research of sufficient quality to enable publication

Activities (details in workplan)

1.1 Hold inception stakeholder workshop to launch project and assess priorities for academic and field course content.
1.2 Devise and develop 6 academic modules and embed into curriculums of UL and FTI
1.3 Produce accompanying educational packs for teachers and students
1.4 Train a minimum of 6 lecturers in module implementation
1.5 Teach conservation modules to UL and FTI students
2.1 CEERCL Steering Committee formed and operational
2.2 Production of CEERCL business plan
2.3 Construct and equip research centre and campsite
2.4 Adapt ZSL field courses for Liberian situation and priorities
2.5 Conduct field courses in field research methods and conservation issues
3.1 Conduct an in-depth review of current understanding of SNP's biodiversity and identify knowledge gaps
3.2 Design and produce CEERL promotional material aimed at international researchers, including posters, leaflets and webpage
3.3 Clear and map a trail system in the park for use by researchers, rangers and tourists
3.4 Continuation and growth of SNP bio-monitoring programme
3.5 Host national and international researchers to conduct applied research work in areas of identified need

3.6 Establishment of small library of books, papers and reports relevant to the study and conservation of Liberian biodiversity
3.7 Train a minimum of 10 community members in basic guiding skills
4.1 Produce monthly and annual reports for CEERCL
4.2 News features and radio broadcasts released nationally
4.3 Research reports/publications posted on www.liberianfauna-flora.org
4.4 Conferences/Seminars attended to present research work
4.5 Establish dissemination network

Annex 3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Total to date	Number planned for reporting period	Total planned during the project
Established codes						
4A	Number of undergraduate students to receive training	0	11	11		60
4B	Number of training weeks to be provided	0	3.5	3.5		21
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	4	40	44		90
6B	Number of training weeks to be provided	1	7.5	8.5		24
7	Number of (ie different types - not volume - of material produced) training materials to be produced for use by host country	1	1	2		3
8	Number of weeks to be spent by UK project staff on project work in the host country	15	2	17		52
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	0	0	0		1
11A	Number of papers to be published in peer reviewed journals	1	0	1		3
11B	Number of papers to be submitted to peer reviewed journals	1	0	1		3
12B	Number of computer based databases to be **enhanced** and handed over to host country	0	0	0		1
14A	Number of conferences/seminars/ workshops to be **organised** to present/disseminate findings	0	1	1		1
14B	Number of conferences/seminars/ workshops **attended** at which findings from Darwin project work will be	1	0	1		3

	presented/ disseminated.					
15A	Number of national press releases in host country(ies)	1	3	4		6
15B	Number of local press releases in host country(ies)	1	3	4		6
15C	Number of national press releases in UK	0	0	0		2
15D	Number of local press releases in UK	0	0	0		2
16A	Number of newsletters to be produced	0	0	0		3
17A	Number of dissemination networks to be **established**	1	0	1		1
17B	Number of dissemination networks to be **enhanced/ extended**	1	0	1		1
19A	Number of national radio interviews/features in host county(ies)	0	0	0		3
18C	Number of local TV programmes/features in host country(ies)	1	0	1		
19B	Number of national radio interviews/features in UK	0	0	0		1
19C	Number of local radio interviews/features in host country(ies)	0	0	0		3
19D	Number of local radio interviews/features in UK	0	0	0		1
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)					£339,627
21	Number of permanent educational/training/research facilities or organisations to be established and then continued after Darwin funding has ceased	1		1		1
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	£164,308	£294,578	£458,886		£271,334
New - Project specific measures						
24	Number of people to receive short training (less than 3 days)	31	27	58		150
25	Number of research projects to be conducted by Liberian nationals	0	1	1		3
26	Number of research projects to be conducted by international students/researchers	1	0	1		3
27	Number of seminars on	1	0	1		3

	conservation issues/research to be organized					

Table 2 Publications

Type (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £
Online news article	Mary Molokwu (2013) Sapo Conservation Centre opens in Liberia.	Fauna & Flora International, Cambridge	http://www.fauna-flora.org/news/sapo-conservation-centre-opens-in-liberia/	