

Darwin Initiative

Annual Report

1. Darwin Project Information

Project Ref. Number	162/13/031
Project Title	<i>Pioneering an Innovative Conservation Approach in Sierra Leone's Gola Forest</i>
Country(ies)	<i>Sierra Leone</i>
UK Contractor	<i>Royal Society for the Protection of Birds</i>
Partner Organisation(s)	<i>Conservation Society of Sierra Leone (CSSL); Forestry Division (FD) of the Ministry of Agriculture, Forestry and Food Security, Sierra Leone.</i>
Darwin Grant Value	<i>£133,900</i>
Start/End dates	<i>15 Oct 04 to 30 September 07</i>
Reporting period (1 Apr 200x to 31 Mar 200y) and report number (1,2,3..)	<i>1 April 05 to 30 March 06 Annual Report #2</i>
Project website	<i>None, but please see http://www.rspb.org.uk/international/conservation/sierra_leone/index.asp for an article about the project</i>
Author(s), date	<i>Alex Hipkiss, John DeMarco, Jeremy Lindsay – April 2006</i>

2. Project Background

The project is located in the 75,000-ha Gola Forest Reserves in the Kenema and Pujehun Districts of Sierra Leone. The reserves are designated as production reserves and have been commercially logged in the past. The civil war in the 1990s ended commercial activities in the area.

Although the overall integrity of the Gola Forest Reserves is not immediately threatened, illegal logging, hunting and encroachment for farming were on the increase. In addition, if the forest does not come under conservation control, it is only a matter of time before logging rights are allocated to a commercial logging enterprise. This project aims to address this threat over the next two years by obtaining a long-term conservation concession for the Gola Forest Reserves over the next two years – i.e. to lease the rights to its management and exploitation. The project has had the initial go-ahead from the Government of Sierra Leone to develop an overall management plan for the concession for cabinet consideration in 2 years time. Darwin support is contributing significantly to this planning process.

3. Project Purpose and Outputs

The purpose of the project is to establish an innovative, participatory management programme for the Gola Forest, Sierra Leone, using a conservation concession strategy.

The outputs are as follows.

- Knowledge of the biodiversity and natural resources of Gola and the ecosystem services it provides is improved.
- A detailed management plan is developed with the involvement of all stakeholders.
- The capacity of the Forestry Division, the Conservation Society of Sierra Leone (CSSL) and local communities to play their roles in the new management arrangement is increased.
- Awareness of the importance of the Gola Forest is raised locally and nationally.

Neither the outputs nor the operational plan have been modified significantly since the project began. The biodiversity surveys have been delayed a little but to minimal impact on the project

4. Progress

This project is the result of a feasibility and pre-project planning process which was conducted in 2003–4. This work involved as many stakeholders as possible. We carried out rural appraisals, a forest condition survey and a cost-benefit analysis with the involvement of all seven Gola communities, and completed the process with a fully participatory planning workshop. In early 2004, we submitted a concession application to the government; this was approved in late 2004.

In the previous reporting period, efforts were concentrated on establishing the project in the field, recruiting staff, renovating offices, establishing administrative systems and completing procurement. The principal partners also signed a tripartite agreement. Initial efforts were made to resurvey and re-establish the forest reserve boundaries and to begin development support to and engage with communities.

Table: progress over the last year against the agreed baseline timetable

<i>Project implementation timetable</i>		
Date	Key milestones	Progress
By Apr 05	Initiate forest studies	Forest studies began a little late as reported in last progress report. They have now started in full.
By Oct 05	Identify the training needs of FD, CSSL and local people by means of meetings with all relevant stakeholders (precise dates to be determined)	Training has been largely on the job and has evolved as the project has progressed. Training delivered to forest guards on an ongoing basis and to the forest survey team.
By Jan 06	Provide 2 weeks of training to 80 people from the FD, CSSL and local communities	Training done and is ongoing.
By Jan 06	Initiate preparation of management plan, incorporating a significant role for local communities, with the involvement of all stakeholders (precise dates of meetings and other consultation exercises to be determined)	This has so far started in an informal way. Work will begin on drafting the plan in the next FY to be completed by September 06
April 05– Mar 06	Continue awareness-raising activities and preparation/dissemination of awareness-raising materials throughout year 2	This is on target and continuing

Research programme

An interim report is appended in Annex 2.

A twelve-member survey team has been assembled and trained, led by an internationally recruited research biologist with a local counterpart. The forest survey is based on a systematic sample. Straight 4 km transects are cut and marked at regular intervals across the forest. In total 180 km will be surveyed. Mammals and their signs are being surveyed along the length of these transects using distance sampling techniques. Birds are being surveyed at points at 200 m intervals along the transects using timed species counts and distance techniques. Habitat and vegetation structure is assessed at these same points. Trees are identified, measured and marked in circular plots centred on these same points. Human activities are scored within these tree plots and also as encountered on an ad hoc basis (all staff have data sheets for scoring human activities as they encounter them) along all transects and baselines connecting the transects. All transects are located using GPS and are tagged at 25 m intervals so it is possible to easily locate any observation to within a few metres.

To date, 110 km of transects have been cut (with a further 50 km of baselines for access). Birds surveys have been conducted at 266 points, mammal surveys have covered 82 km of transect and trees have been surveyed in 181 plots.

Over 200 birds species have been recorded. This is over two thirds of those known from the forest and includes most of the Upper Guinea endemics and species of global conservation concern. Notably, large flocks of White-breasted Guinea fowl have been encountered in the two forest blocks (this is a species highly vulnerable to hunting pressure). One species has been added to the national avifauna (Brown Nightjar) and about 30 species have been added to the list for the Gola Forest and environs. Around 30 forest species known from the forest remain unrecorded, including several key Upper Guinea Endemics (Gola Malimbe, Western Wattled-cuckooshrike, Nimba Flycatcher and Rufous Fishing Owl).

Almost all large mammal species previously known from Gola Forest have been relocated. Some species only known from signs or reports have been seen or otherwise confirmed (Zebra Duiker sighted, Bongo dung and horns) and two new species (Water Chevrotain sighting and Spot-necked Otter sighting) have been observed. Yellow-backed Duiker remains the only large mammal as yet unlocated. Primate numbers are significant with regular encounters with the endangered Diana Monkey and Western Red Colobus, and records of Chimpanzee. African Elephant is also still present, noted from signs (dung and prints) and reports, as are Buffalo (tracks, dung, horns and close encounters).

A living collection of orchids from the forest has been started, and so far several species new to Sierra Leone have been identified.

Reconnaissance surveys and analysis of satellite imagery show that the forest is largely intact in its extent, though there has been more intensive logging in certain localities. Most recent cases of logging concern small-scale logging by villagers, e.g. at the periphery of Gola East. No recent signs of commercial logging have been found.

Public awareness

The public awareness efforts are detailed in section 7 and 8. Local radio has been used very effectively to disseminate information; educational leaflets and calendars have been produced and distributed; and signboards have been produced and erected around the forest and towns.

The project has also been promoted at the national and international scale. For example, it was officially opened by the president of Sierra Leone in June, and was promoted at the CBD meeting in Brazil in March 2006.

Capacity building

On-the-job training is a major activity of the Technical Advisor and other senior staff, and two major training programmes have been developed for the 11 staff on the biodiversity surveys and for forestry staff. Community groups also receive training on a variety of issues (e.g. beekeeping) and 7 community members are part of the biodiversity survey team.

Management planning

The formal writing of the management plan has yet to begin. This will be done in mid-2006 once we have more information from the forest surveys and have piloted the community engagement scheme further. However, a second annual large meeting of communities was held in Kenema in January 2006 to discuss collaboration. Also, 2-day meetings were held in 4 of 7 chiefdoms on forest management issues and interim agreements for development and conservation cooperation.

There is an emerging consensus on the type of human activities that should be allowed in the forest, which will be dealt with in the next report. Data from the field, collected by the survey team, project staff and forest guards is helping to identify management options and problems

Constraints

The major constraint to project implementation has been the shortage of suitably qualified and experienced local staff who can take responsibility for the various activities. In the case of the biodiversity survey, this issue has been addressed by recruiting an experienced team leader from out of Sierra Leone to intensively train the local staff on the job. This position was created using additional funds allocated by the RSPB. However, the budget does not permit us to recruit specialists internationally for each area of activity. As a result, the few experienced staff have to do their best to train and coach other staff on the job, in addition to running formal training activities.

Because of feedback from communities and other partners, more emphasis is being put on livelihood-enhancing activities for communities. These have included training in beekeeping and plantain multiplication, as well as the creation of demonstration farms in each chiefdom, with a woman farmer recruited to take care of each site.

Timetable for next FY

<i>Project implementation timetable</i>		
Date	Financial year: <i>Apr-Mar 2006/7</i>	Key milestones
By Sep 06	2006/7	Complete management plan
By End 06	2006/7	Management Plan presented to, discussed by and approved by planning committee.
By Sep 06	2006/7	Provide 2 additional weeks of training to 80 people from the FD, CSSL and local communities
By Sep 07	2007/8	Complete awareness-raising activities and preparation/dissemination of awareness-raising materials

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- **Actions taken in response to previous reviews (if applicable)**

Half Year report questions and responses:

Question 1: Training and short timescale. Requested that we provide more details on the training assessment and plans that we have developed.

Survey team members have been trained in a variety of techniques relevant to the survey requirements which they are now having to put into practice on a daily basis. They are now competent in:

Use of compass, clinometers, rangefinder, binoculars, GPS – all trainees now able to locate by GPS, and supervise the cutting of a straight transect through the forest, following a compass bearing, unaided.

Identification of large mammals and key birds – trainees are rotated round the three main taxa groups, in each group accompanying an expert leader to assist in the spotting and measurement of targets.

A programme of in-service training for Forestry Division staff within the project is being implemented by senior Forestry staff with assistance from other technical staff. Every month, 14 forest guards receive training on various topics for one or two days. So far, 20 days of training have been carried out.

Seven women farmers have been recruited on a part-time basis to take care of demonstration farms in each chiefdom. These workers, accompanied by seven assistants and 7 collaborators from the Ministry of Agriculture and other agencies, for a total of 21 persons, received 6 days of intensive training on plantain production and multiplication. Most team members are now able to identify key bird and mammal species by sight and sound.

Distance sampling techniques. All survey team members have been lectured on the theory of line transect and point sampling techniques. In addition, the techniques have been practiced in the field and subsequently carried out during the survey. This includes species identification, distance and compass angle measurements, and data recording.

Forest mensuration techniques, i.e. DBH (diameter at breast height) measurements, tree height including bole height and total height, crown condition, trunk condition (deformed or commercially usable), tagging, and data recording.

Besides biological field techniques, all survey team members have been extensively trained in administrative and data recording skills, as well as the supervision of transect cutting teams. This includes e.g. the systematic recording of field data on recording forms, handling field data in a responsible way, managing payments of transect cutting teams and making detailed financial overviews of field expenses.

Question 3: Request for more detail on community uses and impact. Can we give an overview here?

It would be very difficult to quantitatively assess the importance of the forest activities that are now being controlled within the reserve due to project intervention, namely logging, farming, hunting and mining. However, feedback at community meetings suggests that the importance of these activities could be described as follows:

1. Logging: In those areas where logging was going on (roughly half of the forest-edge communities, due to limitations of road access in other areas), it was a significant source of cash income in the communities, mainly in the form of tips paid to village authorities, and amounts of about 50p paid to locals for each sawn board carried out of the forest on their heads. Most communities have respected the logging ban in the reserve without a lot of fuss, but in a few communities people continue to look for ways of sawing timber in the reserve. Many communities are still actively sawing timber on their own land out of the reserve.

2. **Hunting:** Possibly on the order of one or two people from each forest-edge village, or about 100-200 people around the reserves, make a significant part of their living from hunting and trapping. These people can continue to practice their trade outside the reserve, so it is not expected that restrictions on hunting will have a major impact on livelihoods. In most of the forest communities, consumption of bush meat comes after fish as a source of protein.
3. **Farming:** While many people took the opportunity to create farms within the forest during the period when there was no control, our assessment is that all communities have an adequate supply of fallow land out of the forest for farming. The satellite image indicates that the intensity of land use for farming around Gola is much less than in some nearby areas, apparently due to lower population density.
4. **Mining:** From the information we have so far, mining appears to have been carried out recently by small numbers of people in just a few isolated pockets within the reserve. There are many more opportunities for mining out of the reserve, and many young people migrate to other parts of the country to engage in mining.

A series of meetings has been started in each chiefdom, at which people are asked which activities they would like to continue doing in the reserve, aside from the four banned activities above. Fishing is usually at the top of the list, followed by collecting medicine, wild food plants and various building materials. Note that all of these activities appear to be done more intensively in the 'farm bush' than inside the reserve itself.

Question 4: Request for more info on development support from other sources – i.e. German embassy.

The Conservation Society of Sierra Leone obtained a grant of about £5,000 for beekeeping training in 2005. This was a welcome contribution, as the budget for livelihood training activities was very limited. However, it is not considered to be the best use of management time to continue pursuing such small grants, when one considers the time and cost of obtaining and reporting on funds and maintaining relations with the donors concerned. Attempts to interest larger development actors in directing more of their interventions to the Gola area have not been fruitful so far. We continue to keep in contact with the Ministry of Agriculture and Food Security, which is soon to implement a major agricultural programme that will include the project area. Recently, we received a small contribution from a project of German Agro-Action toward the cost of bringing a trainer on plantain multiplication from Cameroon.

• Partnerships

The collaboration between the partners is going extremely well. No particular problems have been encountered and working relations continue to be very positive.

The project has collaborated with the Darwin-funded, BirdLife-led project 'Strengthening Capacity for Biodiversity Conservation in West Africa' during training events hosted by the Gola project.

Seven participants in the Darwin training were recruited into the forest survey team. These included one Forestry staff and six new recruits from forest edge communities. They were selected for the team on the basis of their performance during the Darwin training. This training also provided a basis for the further training required by the survey team.

A total of 12 Forestry Division staff participated in two rounds of the Darwin training that were held in Gola and in the nearby Kambui Hills Forest Reserves.

The project has also worked very hard to encourage other independent researchers to visit the project sites, usually at little cost to the project.

- A survey of forest floor herpetofauna was conducted by Annika Hillers as part of a genetic study of forest refugia in West Africa.
- We are hosting a visit by regional butterfly expert, T Larsen (author of *Butterflies of West Africa*) from 20-30 April. He will initiate a collection for the forest and provide training and equipment to the project to continue in his absence. He has interest in further work investigating relationships between butterfly fauna and human impacts on the forest.
- Any botanical surveys will be undertaken in collaboration with staff of the National Herbarium at the University of Njala.
- A. Barrie of Fourah Bay College, Freetown, will undertake camera trapping of understory wildlife.
- We will also host a visit by regional avian experts R Dowsett and F Dowsett-Lemaire, to undertake a survey of cryptic, scarce and poorly-known bird species in the forest.
- We are also anticipating a visit by Royal Botanical Gardens at Kew to contribute to botanical knowledge of the forest.
- Four members of RSPB staff will visit the forest between October and December for their sabbatical projects. They will undertake surveys of nesting colonies of White-necked Picathartes and surveys of birds and amphibians along water courses in the forest.

- **Impact and Sustainability**

The project profile at the national level has been elevated primarily through radio and a variety of public events. Important public statements have been made by the President and Vice-President. Our impression is that the Gola project is increasingly recognized and viewed favourably, especially by decision-makers.

In terms of interest and capacity for biodiversity, the rapid progress and high degree of motivation of the local staff recruited for biodiversity surveys is very encouraging. There is an increasing number of requests from biology and forestry students to do practical field work with the project.

The project is planned to be long-term, and Darwin support is helping to put in place the necessary mechanisms to complete the management plan and develop the capacity of staff. In parallel to Darwin support the project is establishing a long-term financing mechanism for the project which is currently making good progress.

- **Outputs, Outcomes and Dissemination**

The project is heavily committed to dissemination and public awareness activities. To this end local radio has been used very effectively to disseminate information, with regular slots on the radio for national project staff. Educational leaflets and calendars have also been produced and distributed.

Large metal signboards have been produced and erected around the forest and towns to create awareness of forest laws and general environmental messages.

There have also been some major PR and project related activities, as follows.

The project was launched by the President of Sierra Leone in June 2005 (see Annex 3). The project also had a stand at an agricultural fair in Kenema in late 2005. The Sierra Leone Important Bird Area book was launched in Freetown, with a good mention of the Gola Project. The President of Sierra Leone also praised the project

at a donor meeting in November 2005 in London (Annex 4). The project was promoted at the CBD meeting in Brazil in March 2006 (see Annex 5 for the brochure). A presentation on the project was made by RSPB, CSSL and the Forestry Department to members of the Sierra Leone parliament in January 2006 and other national and local seminars.

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

Code No.	Description	Year 1	Year 2	Total
6a	Community:			
	7 community members trained in aspects of biodiversity surveys as part of survey team	0	7	7
	A volunteer botanist has had 1 month training with survey team	0	1	1
	180 men and women from forest-adjacent villages given introductory training in beekeeping	0	180	180
	FD:			
	3 members trained in aspects of biodiversity surveys as part of survey team	0	3	3
	14 forest guards received 20 days in-house training on forestry issues by senior staff	0	14	14
	2 staff trained on riding motorbike	0	2	2
	CSSL:			
	1 CSSL staff trained in aspects of biodiversity surveys as part of survey team	0	1	1
	8 staff participated in in-house computer training	0	8	8
	1 secretary doing advanced computer training	0	1	1
6b	Survey team: (community and forestry staff) 4 weeks initial, then on-the-job	0	4	4
	Forest guard training: 3 weeks	0	3	3
	Beekeeping training: 3 days	0	.5	.5
	Computer training: 2 days	0	.5	.5
	Advanced computer training: 2 weeks	0	2	2
7	3 general leaflets produced for different audiences (including the 2 produced in the UK)	0	3	1
	1 leaflet produced on beekeeping	0	1	1
	1 2006 calendar produced (in the form of a poster)	0	1	1
	Display materials produced for the Agricultural Fair December 2005; subsequently used at Critical Ecosystems Partnership Fund workshop, March 2006.	0	1	1
	T-shirts of endangered wildlife produced for project launching	0	1	1
	Produced short information video on Gola programme	0	1	1
	Collaborated with BBC in production of documentary on wildlife in Sierra Leone; video now being used as an educational tool	0	1	1
8	Technical Advisor	26	52	78
	RSPB Research Advisor 45 days.	2	6	8
	RSPB Research Biologist (Full time in SL)	0	26	26
	RSPB Project Manager	2	6	8
11b	Mostly relating to ornithological findings, and initial review of impact of civil war on the Gola forest.	0	5	5
12	All bird, mammal and tree data collected are being held in an Access database	0	2	2
	Historical data on different taxonomic groups known in the forest are also being held in a database.			

13	Reference collection of orchids being established – both living and preserved specimens, as well as photographs of most species in flower.	0	1	1
14a	2 day meeting held in Kenema with chiefs Gola Project Launch in Kenema, June 2005 Presentation organized for members of parliament, Freetown, 2006 Project presented at the CBD COP8 meeting in Brazil, March 2006	1	3	4
14b	Wildlife Week October 2005 – organized by our partner, CSSL – two presentations made specifically on Gola Made presentations at 4 other seminars or events organized by others in Sierra Leone RSPB Conservation Science department Full Department Meeting, November 2005 RSPB International Division meeting, March 2006	3	6	9
15A	<i>Five articles in national newspapers</i>	1	5	6
15C	<i>Gola project featured in articles in Guardian and Sunday Times</i>	0	2	2
18a	Had TV coverage at least 4 times. (project launch etc)	1	4	5
18b	The project activities featured on a BBC Film, 'Wildlife in a War Zone, aired on BBC3	0	1	1
19A	<i>4 (Radio UNAMSIL)</i>	5	4	9
19B	<i>One national radio interview/feature in UK, BBC Radio 4</i>	0	1	1
19C	<i>25 (Eastern Radio, Kenema and Sierra Leone Broadcasting Service, Kenema)</i>	1	25	26
20	Estimated value of physical assets (£)			
22	<i>Trees in survey plots have been permanently tagged for revisits.</i>	0		
23	Cofunding (£)			

Table 2: Publications

Type *	Detail	Publishers	Available from	Cost £
(e.g. journals, manual, CDs)	(title, author, year)	(name, city)	(e.g. contact address, website)	
NOTHING YET				

- **Project Expenditure**

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

Item	Budget ¹	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (e.g. postage, telephone)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries (specify)			

John Demarco (Technical Advisor)
John Moriba (CSSL Project
Manager)
Various (Community Relations/PR
Officers)
James Allieu (CSSL Accountant)
Victor Gbetuwa (CSSL Driver)
Various – (CSSL Guards / Survey
Staff)

TOTAL

• **Monitoring, Evaluation and Lessons**

Monitoring occurs continually throughout the project, but there is not a formal monitoring document. Monitoring takes place through the following means.

Regular staff meetings, both formal and informal

3-monthly meetings of staff to review progress against workplan and update workplan

Monitoring visits by RSPB project officer, and RSPB research biologist.

Meetings of Planning Committee (3 partners plus representative of communities) – 3 meetings held

Meeting of Steering Committee – 1

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

The main lessons we have learned are those discussed above under 'Constraints' – namely that there is a marked shortage of suitably qualified and experienced local staff, and that livelihood-enhancing activities are of key importance to communities and other partners. We have already acted on these lessons, and will continue to do so throughout during the remainder of the project.

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

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

While the forest survey is still underway, already we have detected the presence of all the rare large mammals known from the forest, some of which have not been recorded for many years. We are also in a position to say that the forest is largely intact and provides adequate habitat for the species of interest.

The level of understanding by and concrete support from the communities has been steadily increasing, as demonstrated by the suppression of most illegal activities that were going on uncontrolled just one year earlier, largely through the efforts of chiefdom authorities. Recently, 4 of 7 chiefdoms have signed an agreement in principle to collaborate on forest protection in return for specified benefits to communities, following open discussion at general meetings. (Meetings are pending in the remaining 3 chiefdoms.) In the case of Barri and Koya chiefdoms, they have agreed to protect additional chiefdom land in the form of islands in the Moa River linking the Gola West Forest Reserve to Tiwai Island, and important community-owned wildlife sanctuary which contains many of the rare species found in Gola.

Support from the Government at all levels for Gola and conservation in general remains very high. The President and Vice-President have recently made formal public statements to this effect. Practical cooperation from all relevant branches of Government is also very good.