

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 2008

Darwin Project Information

Project Ref Number	16-010
Project Title	Wildlife Wood Project
Country(ies)	Ghana / Cameroon
UK Contract Holder Institution	Zoological Society of London
UK Partner Institution(s)	Timbmet
Host country Partner Institution(s)	<u>Ghana</u> : JCM, LLL and Samartex timber companies, Resource Management Support Centre of Forestry Commission, Bio-monitoring Unit of Wildlife Division, University of Legon, Kwame Nkrumah University of Science and Technology <u>Cameroon</u> : SFID, Pallisco and Alpicam-Grumcam timber companies, MINFOF, University of Yaoundé I, CRESA and CIFOR
Darwin Grant Value	£265,407
Start/End dates of Project	April 2007 / March 2010
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1 Apr 2007 to 31 Mar 2008. Annual report number 1.
Project Leader Name	Dr Noelle Kumpel
Project website	http://www.zsl.org/field-conservation/bushmeat-and-forest/timber-production-in-west-and-central-africa,368,AR.html
Author(s), date	Dr Eric Arnhem, Dr Paul Buzzard, Mr Chris Ransom, Dr Noelle Kumpel, 25 th April 2008

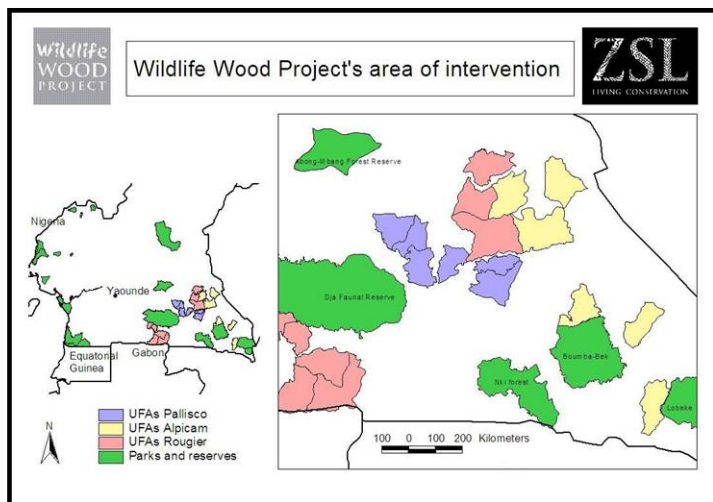
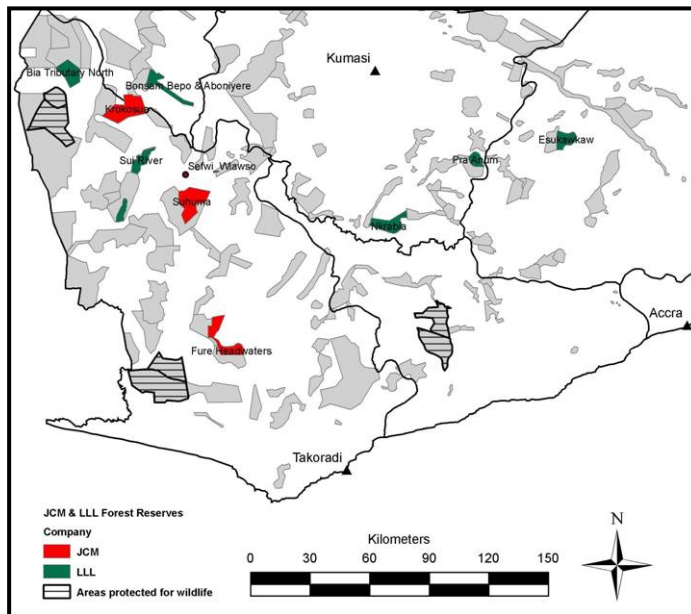
1. Project Background

Protected areas form the cornerstone of forest conservation efforts, but they are often too small and fragmented to support wide-ranging or patchily-distributed wildlife species. As a much larger proportion of remaining forest in Africa - around 50% - is now designated as timber production forest, improved wildlife management in these concessions will make a significant contribution to the conservation of such species. The Wildlife Wood Project (WWP) was established to help logging companies adopt sustainable wildlife management measures in their concessions, by developing cost-effective wildlife indicators, a system of wildlife monitoring and advice on appropriate low-impact logging practices so they might achieve and maintain certification.

Following an inter-governmental conference hosted by the Zoological Society of London (ZSL) in December 2003 and attended by representatives of the Ghanaian and Cameroonian governments, the WWP is focusing on Ghana (WWP-Ghana) and Cameroon (WWP-Cam) to

serve as case studies for West and Central Africa respectively. Progress towards sustainable timber production and efforts to maintain wild animals' conservation status in African production forests requires engagement between conservation and commercial objectives. ZSL collaborates closely with Timbmet, a major timber importing company in the UK, and through this collaboration the WWP has established partnerships with progressive timber producer companies in Ghana and Cameroon. The WWP operates in collaboration with a diversity of stakeholders in addition to the timber companies, including timber certification bodies, conservation groups, universities, local communities and governments.

The WWP was already established in Ghana prior to the start of the Darwin Initiative project, thanks to funding from Timbmet, with Memoranda of Understanding (MOUs) already in place with timber partners. Paul Buzzard started as project manager in Ghana in April 2007. WWP-Ghana has centred its activities in the Western Region, where most remaining forests are allocated to logging. Four forest concessions have been selected from three timber companies to conduct a biomonitoring program: Suhuma and Krokosua forests (JCM); Sui River forest (LLL); and the Boin River forest (SAX) which lies southwest of Suhuma along the border with Cote d'Ivoire. Permanent transects have been cut and data collection has started.



News of our success in gaining this Darwin Initiative grant in April 2007 enabled us to expand the WWP to Cameroon. A trip was made to Yaounde and Douala to meet with government, NGO and potential timber company partners by project leader Noëlle Kümpel and then-project leader Glyn Davies (who has now since left, with Chris Ransom of ZSL in London now co-project leader) in May 2007, in order to introduce the project. Following this, recruitment began for a project manager for WWP-Cam. Eric Arnhem started part-time as project

manager in August 2007, as he was then still completing his PhD in Cameroon, and became full-time from October 2007. WWP-Cam is planning its activities in the Eastern Province in south-eastern Cameroon and three timber companies (Pallisco, SFID (Rougier) and Alpicam-Grumcam) have agreed to collaboration. Five study sites have been selected within these companies' concessions. The survey design has been developed and fieldwork will start in April 2008.

2. Project Partnerships

Project partnerships: As a founding partner in the project, the support of Timbmet has been critical at this early stage. In addition to supporting the WWP financially (by providing essential funding to cover one Project Manager's post and the purchase of a vehicle for WWP-Ghana), Timbmet has assisted ZSL with identification of and engagement with timber companies in the host countries.

Over its area of intervention, the WWP operates in collaboration with six commercial timber production companies: three in Ghana (John Bitar & Company Ltd - JCM, Logs & Lumber Ltd - LLL, and Samartex Timber and Plywood Company Ltd - SAX) and three in Cameroon (SFID (Rougier), Pallisco and Alpicam-Grumcam). All these companies have officially engaged in the timber certification process. WWP-Ghana has acted as a link between its partner companies, providing opportunities for certification managers and other timber officials to meet and discuss approaches and progress towards certification. These interactions are not only important because SAX is further along in forest certification than the other companies, but also because the companies often share forests with neighbouring concessions; future wildlife management in the forests will thus be greatly facilitated by cooperation among the companies. In Cameroon, MOUs between ZSL and the partner companies are in the process of being formalised, with agreement in principle assured, and they have all agreed to recruit staff to set up a wildlife team within their certification management department. These wildlife teams will be responsible for the biomonitoring program and outreach with local communities. A team leader will be recruited by each company to respond to all wildlife-related matters in the company.

Building local capacities, notably by training future wildlife ecologists and forest managers from local government, universities and industry in wildlife monitoring techniques, is an important goal for the WWP and will help the UK, Ghana and Cameroon meet their CBD objectives and obligations. At the government level, WWP-Ghana collaborates with the Ghanaian Resource Management Support Centre (RMSC) of the Forestry Commission and the Bio-monitoring Unit of the Wildlife Division to increase capacity of rangers in establishing transects, data collection, data analysis and reporting. Similarly, the Ministry of Forests and Wildlife (MINFOF) in Cameroon is very supportive of WWP-Cam. MINFOF has agreed to allow its ecoguards to be trained under the framework of WWP-Cam and the formalisation of this agreement under an MOU is underway.

WWP-Ghana has links with two universities; the project is training and supervising an MPhil student, Nathaniel Annorbah, from Legon University in Accra, and has increased ties with Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi. Next year two students will be chosen from one or both universities. Two academic institutions have been approached in Cameroon: the Department of Biology and Plant Physiology of the University of Yaoundé I (UYI) and the *Centre Régional pour l'Enseignement Supérieur en Agriculture Forêts-Bois* (CRESA). Both offer a third cycle-level course in forest management and environmental impact assessment. A partnership has been agreed with those institutions, under which WWP-Cam will supervise the fieldwork of MSc students and provide them with training in modern wildlife monitoring techniques.

Other Collaboration: WWP-Ghana also has fruitful interactions with non-governmental organisations such as Conservation International Ghana, the Ghana Wildlife Society and WWF, primarily at conferences and workshops. The closest collaboration during this first year was with the West African Primate Conservation Association (WAPCA) and the Protected Areas Development Program II (PADP II). These organisations have data on primates and ungulates from Bia and Ankassa Nature Reserves, and they will share data with WWP-Ghana. Because of the high levels of hunting throughout the production forests these reserves will be used as control sites with less hunting pressure for comparison with the production forests. In the future, as management plans are formulated, WWP-Ghana will interact more with WWF and the associated Global Forest Trade Network (GFTN) to facilitate adding wildlife indicator data to the national certification standard. In addition to in-country academic links, as planned, ZSL/University College London PhD student Bjorn Schulte-Herbruggen has been working

alongside WWP-Ghana, carrying out parallel socio-economic research which will feed into the project.

In Cameroon, the Centre for International Forestry Research (CIFOR) is an international research institution committed to conserving forests and improving the livelihoods of people in the tropics. CIFOR has agreed to assist WWP-Cam in conducting socio-economic surveys with local communities that will complement the ecological research carried out in logging concessions. An MOU and work plan will soon be drawn up, and it planned that this will be carried out in conjunction with a student project over the next few months. WWP-Cam also had the support of the British High Commission in Yaoundé to fund the development of a system of monitoring illegal hunting and logging by indigenous communities around the project sites, under the Global Opportunities Fund of the Foreign and Commonwealth Office, although this funding stream was unfortunately cancelled at short notice and so alternative funding for this work is being sought. Finally, WWP-Cam has been in discussion with ECOFAC-Cameroon (an EU-funded project operating in seven central African countries) about collaboration in the Dja Reserve near to the WWP study sites in south-eastern Cameroon, where they have recently recommenced activities.

3. Project progress

3.1 Progress in carrying out project activities

- 1. Wildlife indicators identified in 2 rainforest regions (west and central Africa), which can be used to verify timber certification systems;*
- 4. Cost-effective and scientifically rigorous wildlife monitoring system established, and impact of forest management plans assessed*

A cost-effective and scientifically rigorous wildlife monitoring system forms the basis of the WWP's activities. By carrying out wildlife surveys in several field sites characterised by varying hunting and logging pressures, a set of simple wildlife indicators for use in the rainforests of west and central Africa will be identified. These will later be used to assess current forest management plans. During the first year the WWP aimed to establish transect networks for baseline surveys. These have been established in Ghana and will be soon in Cameroon. The progress of WWP-Cam is slightly behind that of WWP-Ghana as commencement of this side of the project was dependent on the confirmation of Darwin Initiative funding. However, now the project manager is in place (who was already carrying out wildlife surveys in a timber concession in the study area as part of his PhD, so has both practical experience and theoretical insights into wildlife indicators and monitoring protocols), partnerships with companies and universities have been agreed, the project vehicle has been purchased and the project office set up, this side of the project is set to move forward quickly.

In Ghana, comparable treatments of different logging activity have been identified for each of our four forest sites, although hunting levels appear to be uniformly high in all forests (see Annex 3). Survey routes were established along old roads and hunter trails and transects cut; 133 km of surveys have been walked in the forests to date and primates, ungulates and birds are being currently tested as suitable indicators (Annex 3, 4). In Cameroon, a biomonitoring protocol has been designed to assess the impact of three categories of human activities (logging, village hunting, trophy hunting) on wildlife and to evaluate the immediate effects of the introduction of logging activities in the habitat. Five study sites have been selected in the East Province amongst concessions of three companies aiming towards certification and fieldwork (including recruitment of timber company staff and community assistants, and cutting transects) will start in April 2008.

- 2. Species composition, patterns and nature of bushmeat use in timber concessions documented*

Through collaboration with PhD student Bjorn Schulte-Herbruggen, socio-economic surveys have begun in two Ghanaian villages within two different production forests. This socio-

economic work includes hunter, household and market surveys to assess off-take and local trade impact. On a regular basis, hunters have been surveyed and multiple hunting camps have been visited repeatedly. Together, these activities will document the species composition, patterns and nature of bushmeat use in these timber concessions. In Cameroon, a study is being designed with the collaboration of CIFOR to map the hunting territories of three types of villages along a public road passing through several logging concessions; this will start next year, most likely in conjunction with an MSc student project.

3. Wildlife management plans developed in 2 case study forests (1 per country), to develop best practice with timber companies

The project's close contacts with commercial operators enable the review of several forest management plans in the case study forests. Under our expertise, wildlife management actions will be developed with local stakeholders. Preliminary results from WWP-Ghana already show high levels of hunting. A significant part of the management plan will therefore have to include education and enforcement of wildlife laws. Signs are being made at SAX to indicate wildlife laws and will be placed outside their concessions; similar signs will be made for JCM/LLL. Furthermore, forestry commission and wildlife division officials visited the production forests for the first time as part of WWP-Ghana's wildlife survey training. As a result, the officials were able to witness first-hand the extent of the over-hunting problem. While no enforcement was done during these visits, the mere presence of the officials served as a gentle introduction for the hunters of forthcoming law enforcement; such law enforcement can not be done until the end of the project for the safety of staff and students, and so as not to interfere with data collection by Bjorn Schulte-Herbruggen. In Cameroon, a condition for partnership with WWP was the effective recruitment of a team of workers, with about two-thirds of their time assigned to WWP-Cam and one-third to the company. During the last year, they will be in charge of a broad range of tasks, including community and company staff awareness-raising, researching poaching activities, etc. The presence of such teams, dedicated to working on wildlife-related matters, is already a great achievement for the logging sector and demonstrates these companies' commitment to improving the management of their forests.

5. Capacity building through training timber company guards & government rangers, and through MSc studentships

Training local stakeholders in modern wildlife monitoring techniques is an important part of the WWP's effort to counterbalance the current lack of capacity for sustainable forest management in African countries. In Ghana, established survey teams consist of government rangers from RMSC (Charles Haizel and Yaw Fosu) and the Wildlife Division (James Oppong, Yaw Bofo, Koffi Seth), community field assistants and students. Wildlife teams have been trained in GPS use, transect establishment, and wildlife survey data collection. Timber company officials have been incorporated into these wildlife surveys for SAX but not yet for JCM/LLL. This delay has been caused primarily by personnel shifts, and is planned for both companies at the start of the next project year. Furthermore, one student, Nathaniel Annorbah, is carrying out a research project with WWP-Ghana, studying the impact of logging on bird ecology and the potential of birds as indicators. During the second year of the project, two new students will be supervised in Ghana. Additionally, WWP-Cam has agreed to supervise the field work of two MSc students from the University of Yaoundé I (UYI) and CRESA. A MOU will soon be finalised between WWP-Cam and these academic institutions. One study topic has already been determined and will evaluate the influence of transect network design on great ape censuses. This is a joint study between WWP and UYI and is planned to start in May 2008.

6. Knowledge and awareness of timber certification and wildlife management increased among government, private sector, research and local communities, and timber consumers

The WWP's regular presence at the timber companies' sawmill sites, and more specifically our attendance at timber certification conferences and workshops, is helping to catalyse efforts in favour of wildlife in timber production forests and opening a debate about wildlife-related issues. For example, Paul Buzzard from WWP-Ghana attended a training workshop on forest management planning which was supported by WWF and USAID and a workshop on high conservation value forests which was supported by ProForest. Furthermore, the WWP meets

regularly with the Forest Stewardship Council (FSC) in both regional offices in Accra and Yaoundé

3.2 Progress towards Project Outputs

The progress towards all project outputs has been generally satisfactory, for this early stage of the project, with six certification-oriented logging companies on board, engagement from the government and universities, training started and surveys either underway (Ghana) or about to start (Cameroon). We fully expect the WWP to have a substantial impact on the logging sector in terms of improving wildlife management in timber production forests. Despite some slight delays, particularly in launching activities in Cameroon, we are confident that the WWP will rapidly catch up with the project work plan and achieve its goals.

Wildlife indicators such as primates, ungulates, and birds are currently being tested in Ghana; this testing will continue into the next year and more taxa will be added when additional students are enrolled (Annex 3, 4). In Cameroon, a large-scale experimental set up has been designed to achieve the same objective. We are also advancing in the determination of the species composition, patterns and nature of bushmeat use in and around timber concessions. Bjorn Schulte-Herbruggen has completed his pilot study and will commence full data collection for his doctorate next month. Thanks to these achievements, wildlife management plans will soon be developed in case study forests, to develop best practice with timber companies.

A cost-effective and scientifically rigorous wildlife monitoring system has been established and begun in Suhuma forest, Ghana, and comparable systems will start in other forests in the next two months. Regular monitoring reports are produced and local hunters are engaged. The challenge will be to maintain this support as management plans start to be implemented. The impact of these forest management plans will be assessed in the future using these monitoring systems. WWP-Cam has produced a document to summarise its biomonitoring protocol which has been sent out to partners. Study sites have been selected and wildlife surveys are currently being prepared.

In the course of the evaluation of indicators and setting up a monitoring system, in-country capacity has been and will continue to be enhanced; timber company officials, government rangers and an MPhil student have been trained in Ghana. This capacity building is ongoing and progress good, since suitable students and rangers are very cooperative and readily available. In Cameroon, WWP has approached two academic institutions, UYI and CRESA, and agreed to supervise a total of four MSc students within two years. Although student training and project work was planned for years 1 and 2, due to the timing of academic years, they will actually graduate in years 2 and 3 even if they started working with the WWP the previous year (see outputs in Table 1).

The final output of the WWP is increased knowledge and awareness of timber certification and wildlife management among government, private sector, academia, local communities and timber consumers. As noted in the previous section this work is ongoing through our regular interactions with partners and other stakeholders and remains an achievable aim. This goal will be facilitated by sponsoring/organising workshops at the end of the project. Information on the WWP is available on the ZSL website and the recent ZSL report produced by WWP project staff, '*Wildlife conservation and tropical timber certification*', is available to download. An information sheet is currently being produced for the WWP which will also be available to the public on the ZSL website; this has been slightly delayed as other parts of the project have taken priority but will be completed in the first months of year 2.

3.3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Total planned from application (FOR ALL YEARS)
		(PLANNED FROM APPLICATION)					
2	8 MSc students from University of Ghana, Legon and University of Dschang, Cameroun (2 range-state students per year for Yrs 1 & 2 per country). Training will be in the field by MSc and PhD-level ZSL field managers.	0	4	4	/	0 graduates (1 project Ghana ongoing, to graduate yr 2; 2 Ghana & 4 Cameroon to start yr 2 and graduate yr 3)	8
5	4 timber company surveyors will be trained on-the-job over Yr 1, to carry out wildlife surveys (use of GPS, standard field sheets, report writing) (2 in each country)	4	0	0	/	2 part-time (only one company so far in Ghana, further 2-4 to be trained yr 2; 6 to be trained yr 2 Cameroon)	4
5	6 government rangers will be trained on-the-job over Yr 1, to carry out wildlife surveys (use of GPS, standard field sheets, report writing) (3 in each country)	6	0	0	/	5 (Ghana only; 6 to be trained yr 2 Cameroon)	6
6A	6 community project assistants will receive training in socio-economic surveys, and in assisting with the forest surveys (3 in each country)	6	0	0	/	6 (Ghana only; 3 to be trained yr 2 Cameroon)	6
6B	Training of community assistants over a 4 week period (3 in each country)	6	0	0	/	4 (Ghana only; 4 sessions planned yr 2 Cameroon)	6
6A	2 exchange visits by senior project staff, to share lessons learned and appreciate the difference between different sites/regions. One week visit, to one case study forest management unit in Ghana and in Cameroon.	0	2	0	/	0	2

8	280 weeks over the 3-year project period: three weeks per year from the project leaders; 70+ weeks for PhD student studying socio-economics of bushmeat in Ghana; 100 weeks for the ZSL project manager in each country.	93	93	93	/	105	270+
9	Two wildlife management action plans, to be integrated into forest management plans for each of the case study forest management units (one in Ghana, one in Cameroon).	2	0	0	/	0 (to be done yr 2/3 nearer end of project)	2
10	One report on best practice guidelines for wildlife management in timber production forests in West and central Africa.	0	0	1	/	0	1
10	Two ZSL Conservation Reports on wildlife indicators that can be used in timber certification for i) west and ii) central Africa.	0	0	2	/	0	2
11B	Two papers submitted to peer-reviewed journals: on socio-economics of the bushmeat trade in Ghana; on wildlife indicators and timber certification in Africa.	0	0	2	/	0	2
12B	Two databases will be enhanced with wildlife information; the RMSC database in Kumasi, Ghana and the WWF-Cameroon database in Yaoundé, Cameroon	0	0	2	/	0	2
14A	Two national workshops will be organised to present the results of this study in each country, and invite feedback from stakeholders in the country/region.	0	0	2	/	0	2
14A	International workshop to disseminate results to the international timber trade.	0	0	1	/	0	1

15A	6 national press releases (one / year / country)	2	2	2	/	0 (will follow signing of MOUs in Cameroon so yr 2 on)	6
15C	UK press release to show DI support for Wildlife Wood Project	1	0	0	/	0 (UK event and press release planned for yr 2 instead)	1
16A	2 Information Sheets (one for Cameroon / one for Ghana)	2	0	0	/	0 (both planned by June 2008)	2
19A	6 national radio features (one / year / country)	2	2	2	/	1 (awaiting signing of MOUs in Cameroon)	6
20	Equipment valued at £30,000 at date of purchase will be handed over to government or local NGOs.	0	0	£30,000	/	0	£30,000
22	Two (plus) permanent field transects will be established (one in each case study forest management unit)	4+	0	0	/	1 (30km Ghana and more planned for yr 2; 200km in three concessions Cameroon planned for yr 2)	4+
23	Funds from other sources currently amount to £189,000	£71,800	£60,200	£57,100	/	£71,800	£189,000

Table 2 Publications

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
//	//	//	//	//

3.4 Progress towards the project purpose and outcomes

The overall purpose of the WWP is to reduce the unsustainable hunting and trapping of bushmeat in timber production forests of West and Central Africa by identifying wildlife indicators for sustainable forest practices and to incorporate these indicators into timber management plans, to help timber companies towards certification. In the initial phase of the WWP, several organisations were approached and partnerships have been - or will soon be - set up with them under the framework of the WWP.

In both countries, timber company partners are responsive and have shown great interest in contributing to the WWP's project purpose. They are proving willing to lead the forest sector

toward a concrete improvement in wildlife management in timber production forests on the basis of scientific conclusions that the WWP will present to them. The Forest Stewardship Council (FSC) in both regional offices in Accra and Yaoundé has recognised the need for ecological indicators and both offices are ready to review their national standards in consultation with WWP. At government level, the Wildlife Division/RMSC in Ghana and MINFOF in Cameroon are also extremely supportive of WWP.

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

WWP is still at an early stage so impacts at this level are not yet able to be felt. However, as the project proceeds and management plans are implemented, we are confident that the impact will be substantial.

The survival of many rainforest species lies in the readiness of logging companies to improve their wildlife management. This is required by FSC and other certification system standards and therefore will aid the attainment of timber certification. A total of six timber companies in both Ghana and Cameroon have made an important step forward by engaging with the WWP and requesting technical assistance to achieve this goal. In the short-term, we hope to implement concrete conservation actions to current management plans which we will be able to test through the monitoring systems that we will have set in place during the lifetime of the WWP.

4. Monitoring, evaluation and lessons

To monitor the progress of the WWP, monthly reports on meetings/fieldwork/plans/results are sent to ZSL's London office and to our project partners in Ghana, Cameroon and the UK. In addition, monthly financial reports from each project's component are checked by the project leader in London. At least annual field visits are made by the London team to Ghana and Cameroon and by the Ghana and Cameroon project managers to London, in order to discuss progress, including survey design, student projects, workplans, dissemination and policy issues.

Illegal practices, in particular hunting, are well established in Ghana, and wildlife densities are consequently low. This means that the process of defining feasible wildlife indicators and devising a meaningful and affordable system of monitoring is more of a challenge there than for Cameroon, where wildlife is much more plentiful. We are therefore aware that we may need to put in a larger survey effort and test some novel techniques in the course of our research in Ghana.

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

NA

6. Other comments on progress not covered elsewhere

The development of cost-efficient monitoring techniques is a mainstay of WWP. Camera trapping is an innovative technique to monitor wildlife that will be tested in timber production forests. 60 camera traps have been purchased thanks to an approved amendment to the initial budget and will be dispatched to Ghana and Cameroon (20 for Ghana, to be used in conjunction with 20 traps already at our disposal there through Bjorn Schulte-Herbruggen, and 40 for Cameroon) early in year 2. We expect the shots taken by means of these cameras not only to serve for wildlife monitoring but also to be used for environmental education of local communities and logging company staff, and for publicising the project to the wider public through the media and the ZSL website.

The general lack of wildlife in the Ghanaian field sites means identifying wildlife indicators has taken longer than expected. Furthermore, the process for hiring a certification manager at one of the timber companies has also taken longer than expected, causing some inevitable delays in the implementation of the project's activities. Similarly, in Cameroon, the recruitment of an experienced project manager, Eric Arnhem, took slightly longer than planned as Eric was in the final stages of his PhD write-up, which meant the project was three months late in starting (making it six months behind Ghana). WWP-Cam was also set back for nearly two months due to recurrent problems with the first bank transfer from London to the WWP-Cam account in Yaoundé (due to administrative problems at the bank's end as it was new), which delayed the purchase of the project vehicle and field equipment. However, the fact that Eric has already substantial experience of carrying out wildlife surveys in logging concessions in south-eastern Cameroon (his PhD was on the impacts of logging on great apes and other wildlife species), and there are relatively high densities of wildlife in this area, means that less survey effort will be required to identify indicators than for Ghana, and we are confident that WWP-Cam will soon be able to make up for this lost time. Our partner companies in Cameroon are also keen to do all they can to obtain certification, which has helped WWP-Cam rapidly identify sites and gain access to data.

7. Sustainability

Logging companies will have clear guidelines on what wildlife indicators must be satisfied to get certified timber, audited by independent inspectors. The results of the project will be discussed during regional and international workshops at the end of the WWP. A consensus will be agreed on which wildlife indicators should be used in West Africa and across the Congo Basin. These guidelines will be freely available via publications (in both English and French) and on the ZSL website.

In both countries, logging companies, governmental institutions and future forest managers will have increased capacity to carry out wildlife monitoring. This will be achieved by training experienced staff in monitoring techniques so that they can pass on their skills, as well as producing freely-available training materials.

The regional offices of FSC in Yaoundé and Accra have shown considerable interest in our work. Frequent contact to update them on the project's results is being organised in order to actively participate in the discussion and implementation of new indicators in FSC standards. This will have a long-lasting impact on the preservation of forest biodiversity throughout the region.

8. Dissemination

Information on the project is available on the ZSL website (<http://www.zsl.org/field-conservation/bushmeat-and-forest/>), where the recently published ZSL report, '*Wildlife conservation and tropical timber certification*', by WWP project staff Bjorn Schulte-Herbruggen and Glyn Davies, is available to download. An information sheet is being produced to provide publicly available information on the project to a wide audience through the ZSL website. In the second and third years of the project, once we have formal agreements with timber companies in Cameroon and results start to be produced from both WWP-Ghana and WWP-Cam, newspaper and radio coverage will help raise awareness of timber certification and wildlife management at local, national and international level. We are planning, in conjunction with Timbmet, to hold an event at ZSL in London in year 2 for government and British timber industry representatives to publicise the WWP and Darwin Initiative support.

9. Project Expenditure

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

<i>Item</i>	<i>Budget</i> * first amendment (13-02-08) ° second amendment (18-03-08)	<i>Expenditure</i>	<i>Balance</i>
Rent, rates, heating, overheads etc.			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment <i>Field survey equipment</i> <i>IT equipment</i> <i>Cameroon vehicle</i>			
Other costs			
Salaries (specify) <i>Noelle Kümpel</i> <i>Glyn Davies (now Chris Ransom)</i> <i>Bjorn Schulte-Herbruggen</i> <i>0.5 x 2 expatriate project coordinators</i> <i>2 x in-country co-leaders</i> <i>6 x community research assistants</i> <i>6 x forestry department rangers</i> <i>4 x timber company surveyors</i> <i>8 x local MSc students</i> <i>2 x cooks</i> <i>2 x drivers</i>			
TOTAL			

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

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#)

NA

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

Project summary	<i>Measurable Indicators</i>	Progress and Achievements April 2007 - March 2008	Actions required/planned for next period
<p>Goal: <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>Six timber companies committed to improve wildlife management in their concessions; support and active engagement from governments and universities; field sites identified and survey design developed; fieldwork started in Ghana and indicators being tested</i></p>	
<p>Purpose</p> <p>To reduce unsustainable hunting and trapping of bushmeat in timber production forests of West and Central Africa, by identifying wildlife indicators for use in forest certification and national forest regulations, and by developing wildlife management systems with timber companies and local communities.</p>	<p>Wildlife indicators accepted by timber certification authorities</p> <p>Best practice wildlife management protocols developed by timber producers</p> <p>Timber importers and consumers offer financial benefits to Sustainable Forest Management in key areas.</p>	<p>WWP-Ghana regularly liaising with FSC regional office in Accra. WWP-Cam has approached regional FSC office in Yaounde and is participating in debate on the review of Principles, Criteria and Indicators of FSC standards for Cameroon.</p> <p>Six Ghanaian and Cameroonian timber companies willing to get technical assistance from WWP to improve wildlife management.</p> <p>Companies selected to collaborate with WWP officially engaged into the timber certification process.</p>	<p>Liaison will continue with FSC and other certification bodies; similarly with WWF GFTN.</p> <p>Regular meetings with and reports to timber companies include discussion on management ahead of implementation in project's final year.</p> <p>Initiatives like GFTN will increase participation of timber companies; WWP staff in London liaise with Timbmet and participate in policy meetings to increase commercial/ government support for certification and parallel initiatives such as FLEGT to reduce illegal logging. Event at ZSL planned with Timbmet to engage UK businesses in WWP.</p>

<p>Output 1. Wildlife indicators identified in 2 rainforest regions (west and central Africa), which can be used to verify timber certification systems.</p>	<p>Biological survey results show impact of logging and hunting on species by Year 2.5</p>	<p>WWP-Ghana: Surveys are underway in Ghana in four concessions.</p> <p>WWP-Cam: Five study sites have been selected in south-eastern Cameroon amongst concessions of three companies. The preparatory phase is over and fieldwork is planned to start in April 2008.</p>
<p><i>Activity 1.1: Field surveys in forest areas with varying hunting and logging impact. (Activity milestone yr 1: identify forests with 3 levels of hunting pressure (per country) and establish transects for baseline surveys.)</i></p>		<p>WWP-Ghana: Survey routes have been established along old roads and hunter trails and transects cut (30km permanent transects); 133 km of surveys have been walked in the forests to date and primates, ungulates and birds are currently being tested as suitable indicators</p> <p>WWP-Cam: The study has been designed to assess the impact of three categories of human activities (logging, village hunting, trophy hunting) on wildlife and evaluate the immediate effects of the introduction of logging activities in the habitat. Sites in the concessions of three companies have been identified.</p>
<p>Output 2. Species composition, patterns and nature of bushmeat use in timber concessions documented.</p>	<p>Socio-economic surveys completed in 2 – 3 case study areas (per country) by Year 2.5.</p>	<p>Bjorn Schulte-Herbruggen is carrying out socio-economic surveys in two sites in Ghana. CIFOR has been identified as WWP-Cam's partner to conduct socio-economic surveys in villages around its concessions.</p>
<p><i>Activity 2.1: Hunter, h'hold and market surveys to assess off-take and local trade impact. (Activity milestone yr 1: identify key hunters and users, and establish surveys (incl PRA & focal groups) of household and hunter use and trade.)</i></p>		<p>WWP-Ghana: Surveys on hunter/household use of bushmeat and species composition of hunter offtakes are underway in two village sites near project logging concessions.</p> <p>WWP-Cam: A consultant from CIFOR has been identified to design a study with this purpose, probably alongside an MSc student project. The main objective of the first part of this joint study will be to map the extent of hunters' territory in the surroundings of study sites. We are currently discussing technical details of the research.</p>
<p>Output 3. Wildlife management plans developed in 2 case study forests (1 per country), to develop</p>	<p>Wildlife Management Plans developed and being implemented in two case study forests by end</p>	<p>WWP-Ghana: MOUs in place with two timber companies (JCM and LLL) and being formalised with third (SAX) and current and future management activities and implications discussed with timber companies.</p>

best practice with timber companies.	Year 2.5	WWP-Cam: MOUs will soon be formalised with logging companies where it is clearly stated that they agree to implement new measures to improve wildlife conservation in 2009. Logging company partners have given their agreement in principle to recruit one wildlife team per company to respond to all wildlife-related matters.
<p><i>Activity 3.1: Review forest management plans in case study forests and develop wildlife management actions with the timber companies and local communities. (Activity milestone for yr 1: take preliminary results from socio-economic and biological surveys and integrate with forest management plans in 2 case study forests.)</i></p>		<p>WWP-Ghana: Wildlife management plans reviewed and discussed but new management actions now not planned to be implemented until third year of project. Also awaiting appointment of new certification manager for one company. The activity milestone for yr 1 is unrealistic given the slight delays in Bjorn Schulte-Herbruggen's PhD schedule for language learning, meaning preliminary socio-economic results will only be available at end of yr 2.</p> <p>WWP-Cam: Partnership conventions with three logging companies active in south-eastern Cameroon are in preparation. These include the recruitment of a team of workers who will work about 2/3 of their time on WWP-Cam and 1/3 for the logging company. During the last, they will be in charge of multi-purpose tasks like community and company staff awareness-raising, gathering information on poaching activities, etc. The presence of such teams working purely on wildlife-related matters is already a great achievement. The activity milestone for yr 1 is unrealistic given socio-economic surveys are planned to start in yr 2 and management plans will not be completed until 2009.</p>
<p>Output 4. Cost-effective and scientifically rigorous wildlife monitoring system established, and impact of forest management plans assessed.</p>	Regular monitoring reports produced by Ghanaian and Cameroonian researchers and timber company workers	<p>WWP-Ghana: Monitoring ongoing with monthly reports to timber companies; timber companies to take part and be trained in monitoring when certification managers and teams in place.</p> <p>WWP-Cam: A biomonitoring program has been proposed to timber company partners and approved by them.</p>
<p><i>Activity 4.1: Cost-effective forest monitoring. (Activity milestones: none planned for yr 1.)</i></p>		WWP-Ghana: Monitoring in four sites with varying logging histories (but all with high hunting intensity as this is the norm in Ghana concessions) has been started; permanent transects in one of the four sites have been cut and walked.

		<p>WWP-Cam: A document summarising the study design has been completed and sent out to our logging company partners. It will enable monitoring of impacts of 3 kinds of human activities on wildlife abundances. It will involve a network of about 40km per field site, in five sites, hence 200km of transects surveyed per month. This represents one of the largest experimental set ups to assess the impact of human activities on wildlife in timber production forests.</p>
<p>Output 5. Capacity building through training timber company guards & government rangers, and through MSc studentships.</p>	<p>Four MSc students trained per country, in wildlife surveys and socio-economic surveys</p>	<p>WWP-Ghana: MOUs signed with RMSC, Wildlife Division, three timber companies, University of Legon and KNUST.</p> <p>WWP-Cam: MOUs with two Cameroonian academic institutions offering third-level courses in forest management are about to be signed: The University of Yaoundé I and the CRESA. A total of four MSc theses will be supervised by WWP-Cam. MOUs being agreed with MINFOF and three timber companies</p>
<p><i>Activity 5.1: Capacity-building through training. (Activity milestones: yrs 1 and 2: MSc students receive field training and carry out projects (2 per country per year); all years: Wildlife Dep rangers, timber company surveyors and community research assistants receive training in monitoring.)</i></p>		<p>WWP-Ghana: Field training carried out for government rangers from RMSC (Charles Haizel and Yaw Fosu) and the Wildlife Division (James Oppong, Yaw Boafo, Koffi Seth), community field assistants and students. One student from University of Legon currently carrying out project with the WWP which will be completed into yr 2 (a second student was initially recruited but their project was unrealistic); two more students from Legon and/or KNUST to carry out projects with WWP next year with a fourth either next year or in the final year.</p> <p>WWP-Cam: A study topic for one student from the University of Yaoundé I has been determined and agreed upon with academic supervisors. MINFOF has requested some of their ecoguides be trained by WWP next year. Timber companies' wildlife teams are being recruited for training next year.</p>
<p>Output 6. Knowledge and awareness of timber certification and wildlife management increased among</p>	<p>Participation in two national workshops (Yaoundé, Accra) and one international workshop (Brussels)</p>	

<p>government, private sector, research and local communities, and timber consumers.</p>	<p>International / national newspaper and radio coverage</p>	
<p><i>Activity 6.1: Awareness raising of wildlife management in timber production forests. (Activity milestone: Yr 1: press release of project launch in UK, Ghana and Cameroon.)</i></p>		<p>Networking and conference/workshop attendance and regular liaison with government, industry and academic partners in both countries. Awareness is being raised with local partners on the importance of improved wildlife management in timber concessions. No media pieces have been produced to date as the project is still at an early stage. Local radio coverage to raise awareness for workers from one logging company is planned at the beginning of field activities for WWP-Cam.</p> <p>As the project was launched in the UK in November 2006 and was publicised further at a ZSL scientific meeting in January 2007 with talks by ZSL, Timbmet and ProForest and chaired by Barry Gardiner MP (before we had news of Darwin Initiative funding), it was deemed too soon to issue a further press release on the project this year. However we are planning, with support from Timbmet, to hold an event at ZSL in yr 2 to publicise the WWP to government and British timber industry representatives.</p>

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve <ul style="list-style-type: none"> •1 the conservation of biological diversity, •2 the sustainable use of its components, and •3 the fair and equitable sharing of benefits arising out of the utilisation of genetic resources 			
Purpose To reduce unsustainable hunting and trapping of bushmeat in timber production forests of West and Central Africa, by identifying wildlife indicators for use in forest certification and national forest regulations, and by developing wildlife management systems with timber companies and local communities.	Wildlife indicators accepted by timber certification authorities Best practice wildlife management protocols developed by timber producers Timber importers and consumers offer financial benefits to Sustainable Forest Management in key areas.	Timber certification guidelines National forest regulations and timber certification guidelines Price premiums or consumer preference or procurement regulations	Wildlife laws included in criteria for production of "legal timber" Political priority given to changing forest regulations Markets are sensitive to price mark-up for certified timber.
Outputs 1. Wildlife indicators identified in 2 rainforest regions (west and central Africa), which can be used to verify timber certification systems 2. Species composition, patterns and nature of bushmeat use in timber concessions documented. 3. Wildlife management plans developed in 2 case study forests (1 per country), to develop best practice with timber companies. 4. Cost-effective and scientifically	Biological survey results show impact of logging and hunting on species by Year 2.5 Socio-economic surveys completed in 2 – 3 case study areas (per country) by Year 2.5 Wildlife Management Plans developed and being implemented in two case study forests by end Year 2.5 Regular monitoring reports produced	Technical reports and peer-reviewed papers Technical reports and peer-reviewed papers Wildlife management plans signed off by government and timber companies, with support of local communities Monitoring reports	Suitable study sites can be found and timber companies are supportive Permissions are granted by local administration (national permission has already been agreed) Local communities and commercial hunters support, and engage with, wildlife management plans Timber companies have resources and government support to pilot new approaches to wildlife management in production forests

<p>rigorous wildlife monitoring system established, and impact of forest management plans assessed.</p> <p>5. Capacity building through training timber company guards & government rangers, and through MSc studentships.</p> <p>6. Knowledge and awareness of timber certification and wildlife management increased among government, private sector, research and local communities, and timber consumers.</p>	<p>by Ghanaian and Cameroonian researchers and timber company workers</p> <p>Six MSc students trained per country, in wildlife indicator surveys and socio-economic surveys</p> <p>Participation in two national workshops (Yaounde, Accra) and one international workshop (Brussels)]</p> <p>International / national newspaper and radio coverage</p>	<p>Best Practice Guidelines report</p> <p>MSc theses</p> <p>Training certificates</p> <p>Workshop reports</p> <p>Press and radio articles (international & local)</p>	<p>Suitable students and timber company workers can be recruited; suitable government rangers are made available</p>
<p>Activities</p> <p>1 Field surveys in forest areas with varying hunting and logging impact.</p> <p>2. Hunter, h'hold and market surveys to assess off-take and local trade impact</p> <p>3. Review forest management plans in case study forests and develop wildlife management actions with the timber companies and local communities</p> <p>4. Cost-effective forest monitoring</p>	<p>Activity Milestones</p> <p>Yr 1: identify forests with 3 levels of hunting pressure (per country) and establish transects for baseline surveys</p> <p>Yr 1: identify key hunters and users, and establish surveys (inc. PRA & focal groups) of household and hunter use and trade Yr 2: (Jan 2009): biological and socio-economic surveys and results analysis completed (12 months data) and wildlife indicators identified. Yr 3: (Jan 2010): 2 technical reports (Ghana and Cameroon) completed and paper for scientific journal submitted</p> <p>Yr 1: take preliminary results from socio-economic and biological surveys and integrate with forest management plans in 2 case study forests. Yr 2: (Sept 2008): specific wildlife management actions to be implemented in particular forest blocks with agreed and integrated into management plans</p> <p>Yr 2: local teams of government and timber company rangers monitor different forest blocks using standard survey methods for wildlife indicators. Yr 3: (Dec 2009): best practice guidelines drawn up for wildlife management in production forests.</p>	<p>Assumptions</p> <p>Sufficient records of different species to allow rigorous assessment of appropriate wildlife indicators</p> <p>Socio-economic data sufficiently robust to verify appropriate wildlife indicators</p> <p>As above</p>	

<p>5. Capacity-building through training</p>	<p>Yrs 1 and 2: MSc students receive field training and carry out projects (2 per country per year) All years: Wildlife Dep rangers, timber company surveyors and community research assistants receive training in monitoring Yr 2: Ghana-Cameroon exchange field visits</p>	
<p>6. Awareness raising of wildlife management in timber production forests</p>	<p>Yr 1: press release of project launch in UK, Ghana and Cameroon. Yr 2: newspaper and radio articles: Ghana and Cameroon Yr 3: National workshops: Ghana & Cameroon [Yr 3: International workshop to launch Wildlife Indicators and Wildlife Management Guidelines].</p>	

Annex 3 onwards – supplementary material (optional)

Checklist for submission

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