

Darwin Initiative for the Survival of Species

Annual Report

1. Darwin Project Information

Project Ref. Number	162 / 12 / 002
Project Title	<i>Capacity Building for Managing and Monitoring the Bushmeat Trade in Gabon</i>
Country(ies)	<i>Gabon</i>
UK Contractor	<i>University of Stirling</i>
Partner Organisation(s)	<i>Ministry of Water and Forests, Centre International de Recherches Médicales de Franceville</i>
Darwin Grant Value	<i>£53,445 over reported period £162,517 total award</i>
Start/End dates	<i>1 Sept 2003 – 31 August 2006</i>
Reporting period (1 Apr 200x to 31 Mar 200y) and report number (1,2,3..)	<i>1 April 2004 to 31 March 2005 AR 2</i>
Project website	
Author(s), date	<i>K Abernethy, O Hymas, D. Idiata</i>

2. Project Background

- The project is being undertaken entirely in Gabon, Central Africa.

The work builds on research commissioned by the Gabonese Wildlife and Hunting department (*Direction de la Faune et Chasse*) in 2000 and carried out between 2000 and 2003 by a team of researchers from this Ministry and the *Station d'Etudes des Gorilles et Chimpanzés* (SEGC). SEGC is a biological research station jointly staffed by the American NGO 'The Wildlife Conservation Society' (WCS; www.wcs.org) and the Gabonese research institute '*Centre International de Recherches Médicales de Franceville*' (CIRMF; www.cirmf.org). The University of Stirling (www.stir.ac.uk) has a long-standing collaboration (since 1983) with the SEGC research station and became a partner on the current project in 2003.

During the research phase (2000-2003) the project investigated the current parameters of the bushmeat harvest and trade in Gabon. A team of gabonese university students carried out socio-economic surveys followed by 3-day consumption recall surveys across a stratified cross-section of households, in 5 locations from villages to capital city (1000 surveys). They also carried out ethnographic interviews along the commodity chain, from hunters to consumers, including restauranters, transporters, and resellers. A team of field assistants undertook contemporary markets surveys in 15 towns across the country for between 3 and 36 months in each market. This combined data set gave a good overall impression of the size and geographic impact of the bushmeat harvest in 2003, the socio-economic and cultural drivers for consumption and implication in the trade, and the species most severely affected by hunting.

The results of this initial research show clearly that the current harvest and trade are unsustainable for most wildlife species. However, certain species, notably rodents and small antelopes, appear more persistent in the face of hunting than expected and may be candidates for sustainable harvest under strict controls. The socio-economic status of villagers in Gabon puts about 10% of the nation (around 120,000 people) in a position of some economic dependence on wildmeat, usually for its economic value rather than as a source of protein, though some families are still protein-dependent on bush meat. The vast majority of the population uses bushmeat as a luxury commodity, for which high prices may be paid, but which is eaten rarely (Wilkie et al, 2005; Starkey, 2004). Wildlife populations in Gabon are generally declining (Walsh et al, 2003; Walsh & White, 1999; Walsh et al., 2001, DFC 2002) and measures to protect them are imperative if they are to persist, either for their intrinsic value or as a meat resource for the future.

The traditional significance of hunting to now-urban families, combined with the current economic status of at least some villagers, prohibits a ban on hunting at this point in time. However, present hunting and commercial practice is clearly unsustainable and the **imminent loss of the resource** is a serious issue that the government has shown willing to address.

Environmental politics in Gabon are currently very complex, following the creation of a new National Parks Service and the arrival of several multi-million dollar projects, such as the Congo Basin Forest Partnership (CBFP; USAID), Central African World Heritage Forests Initiative (CAWHFI; UN), Conseils pour les Ministres des Forêts d'Afrique Centrale (COMIFAC, Regional), CARPE (Central African Regional Programme for the Environment (CARPE, USAID), Utilisation Rationnelle des Ecosystèmes Forestières en Afrique Centrale (ECOFAC; European Union DGVIII); the Fonds Français pour l'Environnement Mondiale (FFEM; French Government) and at least two Global Environment Facility (GEF; World Bank) applications for Gabon. Environment-based aid for the region could top US\$100million a year over the coming years and this is creating intense political interest in the field. Management of the bushmeat trade is high on donor priority lists yet publicly unpopular in the region. This conflict of interest causes embarrassment in dealings between aid projects and government officials. Often, this is having the effect of driving policy debate away from outside influence, because the curbs that donor's want to see on trade are politically unpalatable at a local level. In addition, 2005 is a presidential election year in Gabon, rendering politically unpopular decisions almost impossible.

The current, extremely pressing, problem is that the government lacks knowledge of how to ensure sustainability of the harvest. As this is the only publicly acceptable justification for curbs on present practice – the lack of a sound plan for sustainability is effectively paralysing all reform in the sector. The government urgently requires advice on legal and economic levers that can be used to change practices, biological information on wildlife populations, an increase in public awareness of the issue, such that management actions are accepted and understood (especially when these are necessarily repressive of current practice), and they require a monitoring programme to evaluate the efficiency of their management strategy and practice, and finally increased capacity amongst staff to design and implement future effective adaptive management.

The project seeks to address some of these requirements, to enable government to move towards good management of their resource.

3. Project Purpose and Outputs

- The major project goal is to bring the government to a point where its staff have the necessary data and know-how to manage Gabon's wildlife populations for their long term persistence and are able to use that knowledge in a structured way to manage a sustainable bushmeat harvest.
- Specific outputs are detailed in the originally accepted logical framework in Annexe 2. In summary they are to produce :
 - 1) a permanent team of trained, professional research staff who will monitor the use of wild life for meat on a national scale. This team will generate 2)
 - 2) a database capable of a) identifying trends in the trade and thus highlighting where management change is needed and where management practice appears to be leading toward stable, sustainable harvesting, b) informing government of any changes in local socio-economic standing which may have been effected by local management of the bushmeat trade (or which may conversely effect change in the trade, which would require adaptive management).
 - 3) a trained database manager, such that use of the data resource is as widespread as possible, making well-informed management decisions possible across multiple sectors nationwide.
 - 4) A forum for cross-institutional collaboration and decision-making on management activities
 - 5) Training courses in database creation & use and the principles of adaptive management offered at all the tertiary education establishments currently training environmental managers in Gabon
 - 6) Public awareness materials and campaigns to increase public acceptance of the management actions that will be necessary to ensure sustainability of the remaining resource.

Neither the objectives nor workplans have been significantly modified since acceptance of the proposal by the Darwin Initiative.

4. Progress

Progress prior to this reporting period:

- The project began in September 2003 and thus has now been running 19 months. At the outset, the project developed from a research study which had assessed the extent of bushmeat consumption and commercialisation in Gabon and analysed the cultural and socio-economic drivers of consumption or involvement in the bushmeat trade (Wilkie *et al.*, 2005; see supporting materials). The DI project has so far created a permanent base for management within the government structures; equipped it with a computer and user-friendly version of the existing research database, updated results from subsequent monitoring and trained 3 government staff in database use, two of whom are currently carrying out Master's projects on the data. A post-graduate research assistant was hired in February 2004 to train and manage new survey teams and to mentor a core team of five project staff. These core personnel are now responsible for project administration, database management, publicity and field data collection (markets and households). A statistically robust design for long-term market monitoring (see supporting materials) was drawn up and a team of survey data collectors hired and trained. This team monitored markets throughout 2004 and began monitoring of socio-economic parameters in March 2005. A university training course has been developed to teach the principles of adaptive

management, the use of *MS Access*® for databases, and the issues governing management of the current bushmeat trade. This course was taught in the Wildlife College and the Science University in 2004 (see supporting materials). The ‘Chef de Service de la Chasse’, the person responsible for Hunting management in Gabon has been fully involved in the project and project staff also have regular contact with and support from the Director for Wildlife. However the legal statutes governing hunting in Gabon are currently under review and have been throughout the life of the project. This could create a golden opportunity for policy influence as many of the government staff are involved in the review process and could integrate the changes directly in a one-step procedure. However, the political sensitivity surrounding the issue is creating a lot of inertia in the process. Government involvement in the project requires that all public information materials generated by the project are approved by the Ministry of Water and Forests and occasionally other Ministries before release; a process which is proving extremely lengthy and has caused some delays in the public awareness objectives of the project!

- The project has advanced in line with the proposed calendar on most fronts, though we are still experiencing some difficulties in our work on policy reform.
 - In **teaching**, the university courses in adaptive management were developed and taught as planned in April 2004 and revised and re-taught in March 2005 (ENEF second course will be taught in the next reporting period in April/May 2005) and we have carried out all the in-service IT training of Ministry staff that we planned.

Student projects are underway at Masters level (3 students). At BSc level, 3 students completed projects during the reporting period.
 - **In-service training activities for project staff** saw all four core staff increase their specialist skills: the publicity officer (Kevin Ndong) received training in the *Adobe Photoshop*®, *Illustrator*®, and *Quark Express*® packages and is now able to format effective publicity documents (see leaflets in supporting materials). However, we are finding that translation and text-editing are still problematic and require skills beyond the competences of our current project team, which causes delays (see below also). Freddy Makiloutila continued to develop his skills in database creation, to work on the database manual (see supporting documents) and was able to facilitate database use by Ministry staff outside the project on 10 occasions. Stevens Touladjan trained 3 new market surveyors and began to take partial responsibility for managing the market survey programme. Sophie Pambo took on office administration duties for the project, although she was on maternity leave during 6 months of the year, so her advancement is less than that of her colleagues. Michel Mbazonga took full responsibility for team management in the field and has organised the household survey teams in 2 provinces. He is preparing to take full responsibility for implementing the national programme in future.
 - The desire for **in-service IT training within the DFC** proved less than we first imagined and we have adapted training in the light of that. Senior staff are now taught on a demand basis, with emphasis on understanding of what computers can do, becoming comfortable with basic computer use and developing trust in computer generated results, rather than technical instruction on how to query databases. We have instead trained a full-time database manager who can work with DFC senior staff to enable them to get information from the database. Junior Ministry staff are directly trained on the database.

- In **public awareness activities**, leafleting had been delayed around 6 months from our original timetable, but has now begun and should continue on schedule, if we decide that it is an effective activity. In all public awareness material development, we are finding that the language style appropriate for different audiences in written French (from uneducated village communities to Ministerial decision makers) requires that several versions of most materials are produced. Every version has to be approved by Ministry staff and we feel that the resulting texts are often in too institutional and ‘academic’ a style to be effective. We therefore carried out a 2-visit study to assess public uptake of information delivered in this way. Surveyors gave out leaflets to people that participated in household surveys. They revisited a week later and asked the householder a short questionnaire, to determine the success of information uptake and message comprehension. The questionnaire leaflets and full results are included in supporting materials but results of the format evaluation (rather than information transfer) are discussed below.

Public reaction to receiving information in the leaflet format showed that only 28% (n=300) households actually read the material within the first week of receiving it. The table below summarises their opinions:

Question	% Yes	% No	Notes
<i>Read either leaflet during the first week</i>	27.8	72.1	
<i>Read both leaflets</i>	80	20	Read only 1
<i>Language was easy to understand</i>	75	25	
<i>Graphics were easy to understand</i>	25	75	
<i>Messages were easy to understand</i>	75	25	
<i>Discussed with others</i>	75	25	
<i>Why didn't you read the leaflets ?</i>	Of the 72.2% who did not read		
<i>I do not think that the bushmeat trade should be stopped and I don't want to read propaganda</i>	59.4		
<i>I hadn't got time</i>	29.6		
<i>Other reason</i>	11.0		

Two key points for the future are highlighted by this 2-visit evaluation:

- 1) Leaflets, and possible all written materials, have a low initial uptake and cannot be used to transfer an immediate message.
- 2) Many people are predisposed to think that information on the bushmeat issue comes from institutions that want to see the practice curbed or stopped, contrary to their wishes. This is making them unreceptive to information and therefore potentially unaware that management strategies may aim to promote sustainability in the face of imminent loss of the resource. The result highlights the current difficulty of gaining grass-roots support for (and therefore political support) for any structured management strategies and partly explains the lack of cross institution buy-in to co-management: no-one wants to take part in this unpalatable task, particularly not in a general election year, as is the case in Gabon in 2005.

We plan to evaluate radio and TV information campaigns in a similar way to the leaflet 2-visit approach in order to decide which formats are appropriate for different messages and audiences.

- In **scientific advancement**, project staff (Abernethy, Hymas, Starkey, Ntsame) held a meeting in Lopé NP in March 05 and began publication planning. First publications are to be drafted by July 2005, alongside a comprehensive report to government on project activities. This is slightly behind schedule, mostly due to the delays in DFC working papers brought about by the delays in convening the Monitoring committee and the subsequent restructuring of our reporting formats to fill this gap. We are confident that this initial delay will not mean that publications are delayed over the entire grant period.
- **Policy related work** was slowest to move forward over the last year, as in this arena outside influences are least under our control. In our half-year report we stated that the Wildlife department was slow to convene the cross-institutional monitoring committee and that we would change our approach if delays continued beyond December 2004. This has unfortunately been the case and we have taken the following steps:
 - 1) we secured US\$20,000 of extra funding from the Helene Lerner Foundation in the US to support a push on this policy issue
 - 2) a first committee of Wildlife Department officials has been convened. This comprises the government staff with primary responsibility for hunting law and policy: The Wildlife Director, the Hunting Service officer, the CITES Bushmeat Working Group Officer. This group have been presented with data summaries that show major trends in markets across Gabon, the 2003 status of household consumption and with a technical presentation on the information contained in the database. They have then outlined which information they would like to be able to present to other groups. Information packs are being prepared by project core staff including these summarised data and will be circulated to around 40 key individuals in other ministries and institutions. These individuals will now be invited to a workshop meeting at which the technical capacity of the database will be presented, along with essential data and management recommendations from the Wildlife Department. At this meeting the Wildlife Director will a) outline concrete proposals for collaborative management actions with the other institutions b) reissue invitations for participation in a long-term monitoring group and use the meeting to gain cross-institution endorsement of the group's activities. The meeting is planned for July 2005 and invited institutions are the *Conseils National des Parcs Nationaux* (CNPN), the *Gendarmerie Nationale*, the SE'TRAG train company, the *Direction Générale de L'Environnement*, the *Direction Générale de la Pêche, Ecole Nationale de Eaux et Forêts*, *Centre Nationale de Recherches Scientifiques et Techniques* (CENAREST), *Institut Gabonais d'Agriculture et Développement* (IGAD), *Centre International de Recherches Médicales de Franceville (Services de Primatologie et Santé Humaine)* CIRMF, the *Directeur de la Santé* and representatives from forestry companies to be identified. Companies *Compagnie Equatoriale de Bois* (CEB), *Société de Bois de Lastourville* (SBL), *Rougier, Bordamur* and *Leroy Gabon* already employ environmental managers and implement 'green' policies, so their participation is expected.

- In summary, during the past year the project has achieved the following :
 1. Continued specialist in-service training for the five core members of the project team
 2. Trained a further 8 people in socio-economic survey methods and a further 3 people in market survey methods (see methods in Wilkie *et al.*, 2005 and Starkey, 2004)
 3. Undertaken between 3 and 12 months of market surveys in each of 6 locations (Libreville, Franceville, Lambarene, Okondja, Oyem, Makokou) following the monitoring plan established in 2003-4 (see supporting materials)
 4. Continued in-service IT training for senior wildlife department staff
 5. Revised and updated the wildlife department database to include information from January 2000 to end 2004 (see supporting materials)
 6. Facilitated consultation of the database by at least 12 Ministry staff outside the project
 7. Produced and distributed information leaflets on the project and the bushmeat issue and evaluated their success in informing the public (see supporting materials)
 8. Mentored the MSc projects of two Wildlife department staff and three BSc level students

The following is the project workplan for 2005-6

Month	Workplan
April –May 2005	Short course in adaptive management and use of databases for USTM and ENEF. In service IT training for DFC (research assistant) Socio-economic surveys across Gabon. (research assistant, survey team and core staff) Second annual report to Darwin Initiative (project leader)
May-June 2005	DFC project staff begin liaison with TV and radio media to design programmes on the bushmeat issue using results and experience of adaptive monitoring. Data-entry for socio-economic surveys (project core team, research assistant) Preparation of scientific papers, information packs and report to government (all staff) Masters research by 2 DFC staff (mentored by research assistant and technical advisor)
July 2005	<u>Cross-institution invited meeting</u> : 1 day workshop meeting in Libreville (organised by DFC) to discuss database potential and possible collaborations with other institutional partners : law enforcement authorities, local communities etc and encourage consultation and understanding of databases. (project leader takes major role in facilitating) Submission of scientific manuscripts and project report to DFC (project leader, technical advisor, research assistant) 2 nd year of BSc student projects begun. (research assistant / technical advisor)
August - October 2005	Monitoring data analysed, recommendations drafted (DFC linked staff, technical advisor) Results and recommendations of invited meeting produced in form of DFC working paper (DFC linked staff, project leader) Radio and TV media campaign prepared for comment/revision from partners

	(DFC linked staff, project publicity officer) MSc theses prepared and submitted (DFC linked staff)
October- November 2005	Small 'student conference' (1 day event) organised to present student project results to DFC and if possible the monitoring committee <u>Meeting of cross-institutional monitoring committee (linked to student presentation day)</u> . Discussion of cross-institutional initiatives, appropriate timing of future committee meetings, funding for future meetings. Media information campaign approved and launched.
Nov-Dec 2005	Public awareness materials disseminated and evaluated for effectiveness
Jan- Feb 2006	Revision and preparation of final versions of public awareness materials after evaluation
Feb 2006	<u>Second cross-institutional meeting</u> , presentation of media campaign materials for endorsement, discussion of trends in monitoring data, planning of joint management activities, including methods for evaluation of success
March 2006	Final curricula established and printed for colleges. Final short course in data analysis for senior management and teaching staff. Short revision training course for teaching staff, 3-day database course taught at USTM.

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

1. We responded to the last annual review in writing to the ECTF (see Annex 2 and supporting materials on DVD), and as no further response from them was received, we assume our explanations were accepted.

6. Partnerships

- The UK-Gabon collaboration has been unproblematic over the last year. However in general as all project staff members are based overseas for the majority of time, interactions with Darwin Initiative personnel in the UK are more limited than we would like. In addition the project leader (Dr Kate Abernethy) has been away on maternity leave during 2004, which lead to some delays in reporting in October 2004 and prevented her attendance at the Darwin events in October 2004. Project staffs generally regret this lack of contact with the Darwin group.
- The project has formed links this year with several other projects on the bushmeat issue in the Central African region. In particular the Wildlife Conservation Society's 'Wildlife Hunting and Trade' programme leader Dr Elizabeth Bennett and 'Living Landscapes Program' scientist Dr David Wilkie, visited the project in March 2005 and met with all project staff. This has resulted in a joint project visit to a WCS logging concession hunting management project in Congo, such that similar initiatives can be considered in Gabon. The Zoological Society of London's Bushmeat and Forest Coordinator, Lyndsay Gale, also made a visit to Gabon in January 2005 and met with the project leader, research assistant and some core staff to discuss collaboration with ZSL's new programme in the region. The FAO Bushmeat coordinator, Douglas Williamson met with project staff in July 2003, during FAO funded meetings to prepare the national strategy on bushmeat management, and has maintained contact throughout the past year as the legal review process continues. Ministry staff collaborator Ernestine Effa Ntsame holds the post of point person for the CITES Bushmeat Working Group and attended BWG meetings in Cameroon in September 2004 to present project work. Conservationists from several universities and ministries have consulted the database for information on particular management objectives.
- Our collaboration with local NGO ANCE has declined during the last year as their interest has moved towards environmental education through schools, rather than public awareness campaigns. We continue to collaborate where possible, but links are weak due to different fields of activity.

7. Impact and Sustainability

- The project has begun to be known within the local scientific and conservation community as an important source of information on wildlife harvests and trade. The frequent consultation of the database by Ministry staff outside the project, as well as others, attests to this. As the project now begins to disseminate results and produce public awareness materials, its public profile in the country will grow much faster. The prevalent attitude that information on the bushmeat issue is necessarily propaganda for stopping the practice is worrying. We did not foresee that the general public would be so unreceptive to information, even without suggestion of changes to their habits. Our evaluations of the effectiveness of different media are likely to be crucial in our success at getting the message across. The coming year will see the emphasis on the public awareness campaign and policy reforms, but we are aware that the strategy will need to remain flexible and adaptive to be effective.
- The project exit strategy relies on four main points
 - 1) The monitoring team and database manager must have permanent posts, and their information be accepted by both the Water and Forests Ministry and more widely by the cross-institutional committee. We feel that they will be most effective as a watchdog organism, rather than as Ministry staff, but in this scenario it is more difficult to ensure their permanence. They could also function reasonably well as Ministry posts. At present, we are taking the following steps to try to ensure financial autonomy for this team, whilst maintaining their independent influence with hunting managers a) they will be trained in grant fund raising b) the DFC linked staff are included in grant fund raising c) the team has office space and facilities within the DFC, d) the cross-institutional committee will be established and thus a need for the service will be perceived across several institutions. If by late 2005 the financial autonomy of the team is in question, we will opt to make a case that their posts be incorporated into the civil service staff. This would require an approximately one year handover to allow the core staff to take civil service entry exams, or to retrain new staff within the existing civil service if they failed. We would need to look for bridging funds for this option, and would thus like to take the decision before the last 12 months of the existing funds. The case against this scenario is a certain loss of independence, but the case for it is the long term security in civil service posts.
 - 2) The database needs to be regularly upgraded with monitoring data, collected using the statistically robust sampling design. This seems likely to happen, given that the core project staff are retained.
 - 3) The DFC and other institutions collaborating on management need to be regularly appraised of trends in bushmeat consumption and commerce. The current database format housed in the DFC has an automatic function to produce reports on any market for any time frame. These reports are produced monthly for the DFC and partners and will be circulated automatically to all collaborators following the invited meeting in July (see supporting materials). Competent analysis of the appropriate management actions to be taken in the light of these reports is more difficult to ensure and will depend on recruiting suitable membership to the monitoring committee. This is the most fragile part of the exit strategy and will require most attention.

8. Post-Project Follow up Activities (max 300 words)

Not currently required

9. Outputs, Outcomes and Dissemination

- Outputs have mostly been achieved. SOM 15 has only partly been achieved and we find this quite disappointing. We have far fewer press releases in the UK than hoped for. This is mostly due to the UK project staff spending most of their time in Gabon, and thus there is less staff time available to promote the project in UK. We are also unfamiliar with how to access UK press networks. This is something we will canvass help with in the coming year.

11B, 14A have not been achieved.

11B – submission of papers to peer-reviewed journals should have occurred in January and is now planned for July 2005, a slip of 6 months.

14A, organisation of the monitoring committee workshop is now planned for July 2005 – reasons are discussed fully in the text above.

- Information on the project has been disseminated in Gabon through two information leaflets distributed to households in Libreville (see supporting materials), two press releases in *L'Union* national newspaper and by word of mouth.

Dissemination of information on project activities will continue beyond the life of the project through a) the monthly database reports circulate to managers and schools and others (forestry companies, NGO's etc)

Table 1. Project Outputs (According to Standard Output Measures) for this reporting period

Code No.	Quantity	Description
4A / 4B	72/2	72 students receive one week pro-rata training in database use. 12 students receive one week training in adaptive management
4c/4d	3/12	3 post graduate students undertook 12 week projects on related topics in July-August 2004
5	5	Five core staff received new skills via in-service training over the year
6A/6B	11/8	8 people were trained to collect socio-economic data, 3 people were trained to collect market data each over 8 week training periods in the field
7	4	A database user manual (updated from 2004) Teaching handouts, paper pdf reading lists, database exercises
8	26/12/48	Project leader/technical assistant/research assistant
12B	1	DFC database transferred in 2004, updated and capacity enhanced
14B	2	CITES BWG meeting, Cameroon September 2004. ZSL Wildlife Hunting and trade meeting, London, September 2004
15A	2	<i>L'Union</i> national newspaper
17A	1	Local network in Libreville for public awareness documents
20	3000	Desktop computer, MSOffice professional, database, Anti-virus software

23	25,000	This is less than expected in matching funds as funds were secured in 2003 US\$, which have lost value dramatically
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Table 2: Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £
*MSAccess guidance manuals in French	Informal user manual for creation and use of MSAccess databases suitable for biological monitoring	Unpublished	info@wcs gabon.org	Postage costs

10. Project Expenditure

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

Item	Budget (please indicate which document you refer to if other than your project schedule)	Expenditure	Balance

- The costs we incurred for printing were lower than anticipated, mostly due to better prices available in Libreville as more printing presses are offering services. We used the shortfall to buy a better computer for the DFC.

11. Monitoring, Evaluation and Lessons

- The stated project purpose is to enhance the capacity of the Gabonese government to manage the bushmeat trade to maximise long-term wildlife survival, as well as the sustainability of local traditional livelihoods. The verifiable indicators of success proposed for this mission were largely measures of training given to provide the government of Gabon with the necessary human resources for adaptive management.

We have stuck to all our targets in training and all our verifiable indicators in this area show success. However, a key point in project success will be that the trained people are able to carry out adaptive management and this has not yet been tested. The verifiable indicators initially proposed are not detailed enough to allow us to self-evaluate against them mid-project. A yardstick could be adherence to the project timetable. Our self evaluation is that we have major slippage against our proposed work on policy reform. We know that this delay occurred primarily because we chose to delay convening of the monitoring committee, due to the legal review in process which we believed would be complete in early 2004. In mid 2004 we pushed for a monitoring committee to convene despite the legal review. At this point we discovered that the DFC was unable to bring partners to the table in the current political climate. Our decision was then to convene an internal Ministry committee which can assess the trends in the harvest and trade and to propose concrete management actions. This committee will now invite cross-institutional endorsement and collaboration. We will then regain the initial timetable, but a year in delay. The reasons for this delay are fairly clear and unlikely to cause a problem in other project activities. We will again self impose a deadline for re-evaluation of our strategy and success in August 2005, after the invited cross-institutional meeting. This will be reported on in October 2005.

- The greatest lesson from this year's work has been the difficulty of dealing with the increasing complexity of environmental politics in Gabon. We are still confident that a cross-institutional collaboration can be developed and that management options that will greatly enhance sustainable management of the wildlife resource do exist. However, to put these in place we must encourage other institutions to share responsibility for hunting management and particularly wildlife trade management, a task which they are at present unwilling to undertake. This encouragement to take responsibility is a necessary step BEFORE the detail of management actions can be discussed or decided, and one that we had not fully foreseen. We are now prioritising wide circulation of information packs for decision-makers, rather than general public information. Whilst we realise that public acceptance of the issue will reduce political opposition to reform and facilitate the task, this sort of change in public opinion is unlikely to be brought about in the term of this project.

12. 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

In this section you have the chance to let us know about outstanding achievements of your project over the year that you consider worth highlighting to ECTF and the Darwin Secretariat. This could relate to achievements already mentioned in this report, on which you would like to expand further, or achievements that were in addition to the ones planned and deserve particular attention e.g. in terms of best practice. The idea is to use this section for various promotion and dissemination purposes, including e.g. publication in the Defra Annual Report, Darwin promotion material, or on the Darwin website. As we will not be able to ask projects on an individual basis for their consent to publish the content of this section, please note the above agreement clause.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2004/2005

Project summary	Measurable Indicators	Progress and Achievements April 2004-Mar 2005	Actions required/planned for next period
<p>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</p> <ul style="list-style-type: none"> • The conservation of biological diversity, • The sustainable use of its components, and • The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose <i>To enhance the capacity of the Gabonese government to manage the bushmeat trade to maximise long-term wildlife survival as well as the sustainability of local traditional livelihoods</i></p>	<p><i>Network of monitors in bushmeat markets established and data used iteratively in adaptive policy development via regular evaluation workshops.</i></p> <p><i>Module in 'Research for Natural Resources Management' for ENEF, and USTM developed.</i></p> <p><i>Policy-oriented research on bushmeat issues carried out by the government, results publicly available in a user-friendly database.</i></p>	<p><i>Monitors are operational and collecting appropriate data for long term monitoring of bushmeat harvest, consumption and trade. A Monitoring Committee has been approved within Government which will assess and use these data for management strategies.</i></p> <p><i>Teaching module taught in April 2004 and February and March 2005 (USTM). 82 students received the course in 2004 and thus far 40 students in 2005 – teaching will continue in April/May 2005</i></p> <p><i>Two ministry staff are now carrying out MSc research on wildlife and hunting management, using the database. Three BSc students carried out summer projects in 2004.</i></p> <p><i>A dedicated computer is in the office at the Ministry. Staff have consulted the</i></p>	<p>Continue to work on convening the Monitoring Committee and empowering them to use the data to guide management decisions.</p> <p>Work on a two-step process to include stakeholders beyond the Wildlife Department.</p> <p>Continue training as widely as possible such that data-based management is widely understood and database use is maximised.</p> <p>Widen policy-oriented research opportunities to other institutions such that there is wider understanding and support for management decisions based on long-term monitoring of harvest and consumption</p> <p>Publicise the existence of the database</p>

		<i>database during 2004 for information relating to policy decisions on sustainable harvests of Red river Hog, crocodile conservation priorities in Loango National Park, creation of National Conservation Strategies for Apes and Mandrills; assessment of elephant poaching for CITES, revision of the protected species lists as well as the creation of a National Bushmeat Strategy and revision of the hunting laws.</i>	outside the Ministry to increase use. Encourage the Ministry to accept outside users by facilitating data sharing agreements and MOU's on data use. Lobby to increase shared responsibility for the problem across enforcement agencies
Outputs			
<i>Nation-wide data on the volume, economics and geographic distribution of the bushmeat trade available to policy makers</i>	<i>Database of trade and socio-economic monitoring data established and managed within the DFC. Regular workshops held to interpret results.</i>	<i>The database has been updated to include data from 2000 – 2004. Automatic forms have been created to produce summary information to managers and these are now circulated each month within the Ministry and its partners.</i>	Produce information pack formats and train DFC staff to do this regularly, such that partner agencies are brought to the table to collaborate in management. Facilitate early meetings.
<i>Training module for ENEF established</i>	<i>One module taught in academic years 2003/04, 2004/05 and 2005/06.</i>	<i>Forty students from ENEF took part in training on policy development in April 2004 and a similar number will participate in 2005. Training materials will be submitted with a copy of the database on DVD, due to size.</i>	Integration of new teaching to the University curricula will take up to two years (initiated in 2004). However, extra curricular teaching can happen at any time. Student attendance at extra curricular events was high and we plan to continue extra curricular teaching in 2005 and integrated curricular teaching as soon as possible.
<i>Policy oriented training relevant to managing the bushmeat trade completed by ENEF students</i>	<i>At least 12 students undertake bushmeat-relevant research projects and give both written and oral presentations of policy</i>	<i>Five students (2 MSc, 3 BSc) have so far undertaken project work (rather than training courses) on subjects related to the bushmeat harvest and trade. A further six student projects will</i>	Increase reporting responsibility on student projects. We are still awaiting reports from the 3 BSc level students. Create a format for student presentations – mini 'student

	<i>implications of research results to policy makers</i>	<i>be supported in 2005-6</i>	conference' day on the issue in late 2005?
<i>Research results communicated to policy makers and public Posters, leaflets and videos produced nationally and internationally that report research results and contemporary policy</i>	<i>Posters displayed in prominent locations. Leaflets distributed in major cities. Videos shown on national television</i>	<p><i>4000 Information leaflets on the project were distributed in Libreville</i></p> <p><i>A leaflet on the current legal statutes governing hunting and trade has been created but is awaiting distribution.</i></p> <p><i>A comprehensive report of all bushmeat related activities is in progress for publication in July 2005 in French and English. This is aimed at policy makers.</i></p>	<p>To ensure public consumption of our messages we need to explore the use of multiple formats – currently printed literature has shown to be weak for immediate impact, but may have a stronger longer term impact.</p> <p>Circulate the comprehensive report as widely as possible in 2005.</p> <p>Political sensitivity to the bushmeat issue prohibits current TV documentary on the issue. We are working through the WCS Gabon communications department to develop a programme format acceptable to the government (no independent channelling exists) for 2005.</p>