

Darwin Initiative Annual Report

Capacity Building for Monitoring and Managing the Bushmeat Trade in Gabon

1. Darwin Project Information

Project Ref. Number	162-12-002
Project Title	<i>Capacity Building for Monitoring and Managing the Bushmeat Trade in Gabon</i>
Country(ies)	<i>Gabon</i>
UK Contractor	<i>School of Biological and Environmental Sciences, University of Stirling</i>
Partner Organisation(s)	<i>Dept. of Wildlife and Hunting, Ministry of Water and Forests, Gabon; University Science Technique de Masuku, Gabon; Centre International de Recherches Médicales de Franceville, Gabon</i>
Darwin Grant Value	<i>£162,225 total ; £68,065 01/04/05 – 31/08/06</i>
Start/End dates	<i>1 September 2003 – 31 August 2006</i>
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	<i>1 April 2005 – 31 March 2006 Annual Report 3</i>
Project website	www.wcsgabon.org/gibier (to be updated 31 May 2006)
Author(s), date	<i>Dr Kate Abernethy, April 2006</i>

2. Project Background

The project is being undertaken in Gabon, Central Africa. It aims to help the government of Gabon to manage the trade in wild animal meat (bushmeat) in order to preserve wildlife populations and wild meat resources for rural people. Sustainable management will require prohibition of hunting of some species and quota harvesting of others, whether this be done through management of geographically defined hunting zones, closed and open seasons and/or protected species lists.

The project builds on research commissioned by the Gabonese Wildlife and Forestry department (DFC) and carried out in Gabon from 2000 to 2003 by a team of researchers from this Ministry and the *Station d'Etudes des Gorilles et Chimpanzés* (SEGC), a field research station staffed by the Gabonese research institute '*Centre International de Recherches Médicales de Franceville*' (CIRMF) with support from the NGO 'The Wildlife Conservation Society Gabon'. All three of these institutions are partners of the University of Stirling on the current project.

Between 2000 and 2003, the project had a purely research focus, designed to elucidate the current size of the bushmeat harvest and trade, the socio-economic status of hunters and consumers, the availability and price of alternative proteins and sources of income, the geographic location of trade venues and transport routes and the status of wildlife populations being harvested (the latter in collaboration with contemporary projects on wildlife population distribution and protected area evaluations in Gabon (WCS & DFC, 2002).

The results of this project showed clearly that the current harvest and trade are unsustainable for most wildlife species. However, certain species, notably rodents and small antelopes may be candidates for sustainable harvest under strict controls. The socio-economic status of villagers in Gabon puts about 10% of the nation in a position of some economic dependence on wildmeat, usually for its cash 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). 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.

Political will in Gabon is to curb the current harvest and trade to sustainable levels, rather than to eliminate use of bushmeat. The cultural 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, the unsustainability of present practice and the ensuing imminent loss of the resource to families who are nutritionally dependent on it, is a serious issue that the government has shown willing to address.

The current, extremely pressing, problem is that the government lacks knowledge of how to ensure sustainability of the harvest. They require advice on legal and economic levers that can be used to change practices, they require biological information on wildlife populations, they need public awareness of the issue to increase such that management actions are accepted and understood (especially when these are necessarily repressive of current practice), they require a monitoring programme to evaluate the efficiency of their management strategy and practice, and they require increased capacity amongst their staff to design and implement effective adaptive management for the future.

3. Project Purpose and Outputs

The present project is no longer a research endeavour, although clearly ongoing data collection on the state of markets, harvests and consumer practice are necessary. 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, whether their policy includes a controlled harvest of some game species or not. In supporting of this main goal, the project aims to increase public awareness of the issue, to pave the way for reforms in management.

Specific objectives are detailed in the logical framework in Annexe 1. In summary they are to:

- identify and train a team of professional research staff who will monitor all aspects of the use of wild life for meat on a national scale. This team will generate
- a national database, containing biological, economic and socio-economic data, capable of identifying trends in the trade and thus highlighting where management change is needed, where management practice appears to be leading us towards stable, sustainable harvesting, and to inform the government of any resulting changes in local socio-economic circumstances, which may have been effected by local management of the bushmeat trade (or which may conversely affect change in the trade which will require adaptive management).

The project will train database managers, such that use of the data resource is as widespread as possible, making management decisions nationwide as well-informed as possible.

Training in database creation and use and in the principles of adaptive management is being offered by the project in all the tertiary education establishments currently training environmental managers in Gabon.

- To produce public awareness materials and where possible assess the relative cost-effectiveness of different media options for public information. This analysis will help future government awareness campaigns that will pave the way for new management actions and/or legislation to be widely accepted, both nationally and internationally.

Public awareness campaigns are being designed and carried out to prepare the public for changes in management practices that concern hunting and bushmeat consumption, in order to, it is hoped, increase public acceptance of the necessary curbs to ensure sustainability of the remaining resource. The general understanding of printed, radio, TV and other publicity materials, and the attitude changes that are effected are being measured as far as possible, in order to advise the government on a cost-effective information plan for the longer term. A media campaign plan should include the ability to forecast budgets in order to access state or outside aid-funding to sustain these public information initiatives..

Neither the objectives nor workplans have been significantly modified since acceptance of the proposal by the Darwin Initiative, however general elections in Gabon in 2005 slowed progress on our policy agenda. This was reported in the Oct 2005 half year report. The project is working to regain the original timetable in 2006.

3. Progress

- Project background

The project began in September 2003 with the recruitment of the Gabonese monitoring team, the technical advisor (Malcolm Starkey, Univ. of Stirling) and the set-up of a project management team in Libreville, Gabon (Dr. Kate Abernethy (project leader), M. Daniel Idiata Mambounga (Ministry representative responsible for Hunting practices 'Chef de Service de la Chasse') and Mlle. Ernestine Ntsame Effa (local team coordinator; replaced by Anne-Marie Moussavou in 2006), with an office in Libreville and a base for a computer in the Ministry (office of Daniel Idiata). M. Oliver Hymas (University of Stirling) was recruited in January 2004 to technically advise and manage this team. Contacts were established with the National Parks Service, the two National Universities and the Wildlife College in order to integrate database use and adaptive management teaching to the curriculum during this academic year. The first training courses were offered at all these institutions in March and April 2004 and then again in spring 2005 and 2006. In total around 200 undergraduate students have attended a short, introductory course and 36 students have participated in 7-10 day residential courses on the subject. University teaching staff have received parallel training in giving these courses. Alongside the teaching element, the monitoring team have collected data on a national selection of bushmeat markets and a cross-section of households to assess bushmeat trade volume and profile, consumption: trade ratios, hunter and consumer profiles and both the socio-

economic and cultural levers controlling the trade. This data has been compiled into a national database, which can be queried to provide insight into the current state of the trade, and more importantly can be used in future for comparative analyses of the situation before and after various management interventions. Staff of the Wildlife Department have been given computers, copies of this data and training in how to use the database. Three staff received specialised training to manage the database, others received basic training to allow them to understand the database and direct simple queries.

- **Progress over the last year**

The project team has followed the timetable, achieve the milestones and been able to produce most of the standard outputs originally hoped for during the reporting period.

Adherence to the originally agreed Outputs are reported in the section on outputs below

- **Achievements of the past year**

During the 2005-2006 reporting period the project has largely achieved its milestones and been able to follow the project timetable, with the exception of the cross-institutional monitoring committee, which has had to remain an internal Wildlife Department forum due to the political inertia of the last 18 months (see below). This slippage was reported in the half year report of October 2005, when we hoped to hold the meeting in early 2006, but we have unfortunately not been able to instigate the meeting as yet.

We have been able to set up the links with radio and TV media outlets and Kevin Ndong and Olly Hymas are working towards production of TV documentary style programmes on the bushmeat issue in 2006.

All the proposed student teaching has been delivered and final edits are being made on the teaching pack and curriculum. These will be submitted to the Darwin Initiative separately (before the final report of end 2006) as they are not yet fully finalised and in any case, will exceed the 3Mb limit for supporting materials for this report.

A suite of public awareness materials are being made and delivered to partners for approval and the campaign will be made over the next few months.

The Wildlife Department staff training has been largely successful, though will continue through the final months of the project, particularly focussing on Inès Nyinguema and Anne Marie Moussavou, the two Wildlife department staff newly linked to our project.

- **Problems and solutions of the past year**

As reported in the half year report of October 2005, the presidential elections of November 2005 essentially paralysed decision making within the civil service from mid-2005 until the present, and as local legislative elections have been announced for November 2006 and campaigning has already begun, 2006 is unlikely to be much more productive in policy reform. We have begun to plan to keep a core team functional beyond the end of the project life in order to continue to lobby for cross-institutional common policies on Wildlife Law enforcement. To this end we have put in grant applications to the US Fish and Wildlife Service, the US State Department, the People's Trust for Endangered species and others for funds.

On other fronts, training, public awareness and Monitoring, our milestones have been achieved or will be achieved in the final months of the project.

Generally, reporting the project will require more attention over the final months of operation than predicted. Although the project milestones have been fulfilled and timetable largely respected, I feel that the potential for scientific publication and working papers has not been fully achieved. The working papers we proposed were originally linked to policy change, and as this has not happened due to the national legal review not yet being finalised, the working papers have been left aside. However, in discussion with the Wildlife Director, there is potential for other working papers on the methods and data acquired during the project and

we hope to write these during the next few months. The Project leader and technical advisor will take prime responsibility for these reports, with editing from Wildlife Department staff.

- **Project refinements over the past year**

The project has not been significantly modified in the past year, however, the exit strategy has had to adapt to 2 circumstances beyond our control. The first is that Ernestine Effa Ntsame, who had been part of the 'Projet Gibier' team since 2000 was removed from her position in the Wildlife Department in January 2006, following her marriage to a French citizen and subsequent move to France. Her replacement within the department is keen to work with the project and motivated to gain new skills. We are hoping that she will take over Ernestine's role in policy-making and management of the database within the Department, but with only 5 months of funding remaining, she is unlikely to be able to learn the publicity skills we hoped Ernestine would use to continue the public awareness initiatives. Our alternative plan is that team member Kevin Ndong continues to work for the project beyond August 2006 (we have applications in for new funds for his work) producing public awareness materials and we use the next 5 months to establish a new convention (MOU) with the Wildlife Department under which Kevin can work for them as a consultant whilst we identify a Ministry student who can receive training from Kevin over the next 12-24 months.

The second, and more serious adaptation, is that we need to deal with the situation that the Wildlife Department has been unable (thus far) to convene the cross-institutional Monitoring committee we hoped for in 2003. Whilst we are continuing to work within the Wildlife Department to plan their management activities using the national database to highlight areas of concern, other law enforcement agencies whose aid could be harnessed are not yet involved in collaborative efforts to plan a national strategy for wildlife law enforcement. Culpability for the delay in creating the cross-institutional forum does not entirely lie within the Wildlife department; a long awaited revision of the Wildlife laws (which has now been in progress throughout the life of the project¹) is still not complete, and the political upheaval of the presidential elections of November 2005 (which will be followed by local legislative elections in November 2006) have left the climate for policy making very unclear and civil servants in general have unwilling to take up new initiatives.

We do still hope that this committee can be convened before the end of the project and have put all in place for a successful cross-institutional meeting to be held, with a clear agenda and desired outputs, such that we will be able to aid the Wildlife Department to host the meeting as soon as the political climate allows them to. However, we need to be realistic that this may not happen. Over the next five months, the project will put together all the materials required to run a successful cross-institutional forum (explanations of the research behind the database, printed output from the database and examples of its use, posters illustrating case studies like decline of apes, local trends in species traded or economic differences between urban and rural markets; suggested meeting membership, agenda and desired outputs; budget). Even if the project life is over before the meeting is held, the current internal monitoring committee will continue and will hold these plans for the cross-institutional meeting, such that they should be able to host it independently when the time arises. They may be able to do this by submitting it as part of their annual state budget, or by raising external funds (more secure). Either way, the detailed planning should help the Department to hold a successful meeting, and at minimum is a useful capacity building exercise in itself.

- **Timetable for the next 5 months**

The project end date is 31 August 2006, thus the next report will be the final report, concerning the entire grant period, but with new information only from the final 5 months of operation in Gabon.

The original workplan for this period aimed to

- conclude the teacher training and final training modules in the colleges and Universities, provide final materials packages to future teaching staff,

- to pass responsibility for the national bushmeat monitoring database to the Wildlife Department' management team
- facilitate the Wildlife department's sixth monitoring committee meeting and work planning
- prepare and submit at least 2 scientific publications to peer reviewed

Project staff envisage being largely able to respect this work programme, but the 3 years of project life have enabled us to add detail to these objectives planned in 2003.

The student teaching has been concluded with the last Darwin Initiative funded courses run in April 2006. Teacher training and handover of materials will likely take place over the next few months at the Lopé National Park Conservation Training Centre (CEDAMM), which hopes in future years to run 2 residential courses per year for USTM and ENEF students respectively. Funding for these courses will be sought jointly by the Wildlife Department, the Universities and CEDAMM. The CEDAMM staff is already in discussion with the Tropical Biology Association, the British Ecological Society and various Universities to provide technical support for these courses in addition to the national teachers trained through the current Darwin Initiative efforts of the past 3 years.

USTM and ENEF personnel involved in the Darwin collaboration hope to host on site extra-curricular training courses prior to the residential courses, in order to identify suitable, motivated candidates who will then be offered week-long, residential courses in database use and adaptive management, at Lopé.

The Wildlife Department managers identified and trained during the project are still in training; Daniel Idiata Mambounga will return from Canada in June to carry out 3 months research on elephant hunting in the Gamba-Loango area. He will use and contribute to the database during this time and plans to take a strong role in database management on completion of his dissertation in 2007. Ernestine Effa Ntsame has been replaced as bushmeat focal point in the Wildlife Department (Jan 2006) and we are now working with her direct replacement, Anne-Marie Moussavou and a junior staff member who did her degree project with us in 2005, Inès Nyinguema. We are hoping to train Inès to take a role in database management as she has already completed much of the database technical training as an undergraduate with the project. Inès and Anne Marie will take over responsibility for reporting the monitoring data to the Wildlife Department staff for planning law enforcement. Currently the committee informed are the Director, the assistant Director, the *Chef de Service de la Chasse*, (*Chief of the Hunting Service*) the *Chef de l'Equipe Mobile Anti-braconnage* (Chief of the Anti-poaching Mobile Unit), the *Point focale Viande de Brousse* (Bushmeat point person) and the GrASP national representative (Great Apes Survival project rep.). If a cross-institutional meeting can be arranged, Inès and Anne-Marie will be highly involved in organising this, alongside Daniel Idiata, once he returns from study.

Freddy Makiloutila, who was a core project staff member and is most highly trained in database use is currently completing his postgraduate DESS (funded by the EU) in Environmental Management at the *Ecole National des Eaux et Forêts*, but continues to work with the project, using the database in his own dissertation and using his skills as a trainer in the ENEF undergraduate training sessions offered in early 2006. He will graduate in late 2006 and will then be available for consultations of the database.

We do not envisage being able to hand full responsibility for database management to a Wildlife Department team until these project mentored staff are available for full time commitment. Until then, the master copy of the database will remain and be updated in the project offices with a copy updated monthly in the Wildlife Department office. This copy is available for use by Dept staff who have received computer training, but they cannot modify the database or create new queries alone. Project expatriate staff will continue to provide this service until Inès Nyinguema is competent to manage the database and Freddy Makiloutila completes his DESS qualification. This will probably mean that full control of the database is not with the Wildlife Department until very close to the project end date.

Even when the Wildlife Department hold the master copy and responsibility for updates and new data, in a reversal of the current situation, 'Projet Gibier' will retain a copy in the offices

of its scientific partners CIRMF and WCS Gabon, in order to ensure safety of the resource and widen general access.

The project leader, Dr. Kate Abernethy will remain in Gabon, working for CIRMF beyond the Darwin Initiative project end, and project core staff Malcolm Starkey, Kevin Ndong and Michel Mbazonga are hoping to be successful in their quest for new funds to maintain some project activities in public awareness and training for socio-economic monitoring, thus 'Projet Gibier' will continue to exist, in much reduced circumstances, but technical help will be on hand to maintain the database beyond August 2006 in the event of need.

The UK team will also work on scientific papers and revision of the working paper series originally proposed to reflect the more technical aspects of the project in the light of delays on policy change. These technical papers will be edited by the Wildlife Department staff.

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

Six points relevant to continuing work (below in blue) were raised as queries to the PI in the AR2R. Actions taken during the last year in response to these are discussed below each point.

1. **Influencing policy:** The proposed cross-institutional consultation processes are positive. It will be important to ensure that the process is led by the Wildlife Department. The meetings should be seen as opportunities to pool knowledge and expertise of all invitees/ members of the committee – of which the monitoring programme is one component – towards developing collaborative solutions. There may be scope for extending the monitoring programme to integrate knowledge provided by other members of the committee e.g. representatives from the health and forestry sector

The Monitoring committee invited membership includes representatives from the Ministry of Health, and the Direction responsible for Forestry industry permits. However, it has not included individuals from private forestry companies, due to concerns about a large membership becoming ineffectual. One regret is that the political inertia of 2005 has meant that membership revision is unlikely now to be possible during the project life. Altogether the project has identified the following partners to target for membership of the committee, not all have provided attendees as yet: Direction de la Faune et Chasse (Wildlife Department, host), Ministère de l'Environnement, Conseils Nationale des Parcs Nationaux, Ministère de la Santé, Ministère de la Pêche, Gendarmerie Nationale, Ministère de l'Intérieure (and representative of locally-elected deputies) , Ministère de la Défense Nationale, Ministère de la Justice, Ministère de l'Agriculture, Centre Nationale de Recherches Scientifiques et Techniques (CENAREST), NGO representatives (both wildlife conservation and human development sectors), foreign aid agency representatives (EU, USAID, WB, UN etc).

2. **Integration of teaching into university curricula:** What is the process for integrating the teaching and how far are the project along this process? To what extent are teaching staff involved in university training.

In order for a new course out with the standing curriculum to be integrated to a Faculty teaching programme, it must be proposed by the relevant department staff and taught as extra-curricular for 1-2 years. The content is then assessed by the Dean and if accepted, a teaching slot is timetabled for the following session. Core course are usually timetabled at 2-4 hours per week, though block teaching can be negotiated it is problematic to timetable around other courses.

At present, the current database and adaptive management course has been taught as extra-curricular for 2 years at USTM and ENEF. If local staff who have trained on the course are motivated and can find a small amount of funds for course materials (software updates, CD's, printing of course handouts etc) then the course will be presented for assessment and integration to the curriculum in the future. The Darwin Project has trained University staff at USTM to a position where they could organise and teach the basic undergraduate course, but has not successfully identified trainers of a sufficient calibre for the residential course. To address this, we propose to help University staff to hold the course at Lopé, where USTM staff can organise and host the course, continue to receive some training themselves, but will draw on the expertise of Lopé staff for specialized student training in early years.

If the University staff are not successful in proposing the course for integration to the curriculum, they may and we hope will, continue to teach both the short preparatory course and the residential course as extra-curricular activities. To date this has been successful in identifying promising students for other training and has increased the skills of all the graduates of the class, so a positive impact can still very much be had as an extra curricular course. As an indicator, from a pool of 50 students taking the residential course in conservation biology through the two Darwin Initiative projects run in Gabon since 1999, 18 (36%) have since been employed in conservation biology professional jobs in the country and/or have gone on to tertiary qualifications in conservation biology.

3. **Developing project staff/ the monitoring unit: Have project staff also received training and support in policy, management and advocacy issues? How are staff involved in policy-related work?**

Staff have received a considerable amount of management training within the project. Each national staff member has a personal interview with the project leader and research staff every 6 months, to discuss career objectives and their personal view on the project overall direction and success (or otherwise). These individual meetings are followed by a general staff meeting to discuss the next 6 months' duties and workplans. This system has resulted in specialization of most core staff members through access to individual training and autonomy is a part of their workplan. In year 2, the core staff members were given individual workplans and budgets to manage for part of their activities beyond the team efforts of the project, and this year, year 3, they are developing not only their own elements of the project, but also applying for individual and group small grants to perpetuate these activities.

Michel Mbazonga specialised in field team leading, logistics and management. He worked for the US National Science Foundation 'Parks & People' project last year as a team leader and field work coordinator and is looking to extend this role providing training for socio-economic field work through the NGO training programmes, the Wildlife college and CEDAMM in Lopé.

Kevin Ndong specialised in media and publicity and has learned to use several graphics packages and other media tools. He is currently working for a multi-partner project to catalogue and copy as much DV footage and still images of wildlife in Gabon as can be accessed, and make them available for non-profit use for conservation. He will continue to work for Projet Gibier for the next 5 months finalising media materials, in particular for TV, Internet and radio.

Stevens Touladjan specialised in Environmental Education and has been working with WCS Gabon, PPG (Projet protection de Gorilles) and others to develop EE materials that highlight the bushmeat issue and integrate his real data and understanding to the teaching. He would like to move on from Projet Gibier core staff and join an Environmental Education team (local or international NGO). Clearly his 5+ years within 'Projet Gibier' and the detailed understanding he now has of this issue will greatly enhance his ability to teach generally on Environmental topics.

Freddy Makiloutila specialised in database management and has left the projet to continue tertiary studies on an EU scholarship. He is still based in Libreville (ENEF) and continues to be involved in database management. We hope he will return to the project in some capacity to widen capacity to use the database.

These core project staff did not receive much training in advocacy or policy to date, but are due to attend a USAID funded workshop in Cameroun next month (May 2006) where they will present their work of the last 2 years and discuss how to get data into policy and strategies for integrating non-government research work into policy. The project's DFC partners (Anne Marie Moussavou, the new DFC bushmeat point person) will also attend this workshop, hosted by the project).

Policy and advocacy mentoring effort has been mostly focused on government staff, in particular Ernestine Effa Ntsame and Daniel Idiata in years 1&2 and Anne Marie Moussavou and Inès Nyinguema in year 3, due to staff reshuffles in the department and Ernestine and Daniel's absences for further education. The choice to target government staff, and ultimately

to partner with government on this project, was largely a function of the immense dominance of the state in policy and relatively small influence of NGO's or individuals outwith the state departments.

The effort has largely been positive, though a vast inertia in the Gabonese government makes progress hard to discern, certainly these staff demonstrate better understanding of the issue and better awareness of donor and other external concerns for management. Increases in awareness must be seen as positive even if real policy changes are small.

4. **Dissemination: Monitoring impact of dissemination is useful – but could be extended to capture perceptions of the bushmeat issue (as well as registering whether any information has been taken up) as a basis for developing further information campaigns. Has the project considered identifying “champions” for change in behaviour relating to bushmeat – drawing on “success stories” of local and national people e.g. members of wildlife management groups – for the awareness campaigns.**

The project has been working generally with the conservation community to develop ‘icons’ for the conservation and environmental awareness movement in the country. Much of this is championed by the President himself, who is very publicly seeking to create a new ecotourism destination in Gabon and requiring better environmental policies to support this vision. The creation of 13 new national parks in 2002 was internationally lauded and has resulted in a newly agreed GEF finance for sustainable development of these Parks over the next 5 years. At present, the President’s message to the foreign and donor community is much stronger than the publicity at home on the issue, which affects the population’s perception of their ‘traditional’ way of life in the forest, even though extremely few people still depend directly on forest products for their livelihoods.

The traditional musician **Pierre Akendengue**, (internationally acclaimed on the world music scene and recognised by all Gabonese as the ‘father’ of Gabonese music today), the singer **Annie Flore Batchielilys** (winner of the MTV best new African artist in 2002 and one of the most popular music artists in Gabon in the last 5 years) and the painter **Georges Mbourou** (internationally recognised painter and winner of the competitions to design both the Africa Pavilion façade and symbol at last year’s World Exhibition in Japan) have declared their wish to use their public position to campaign for the environment and all have had meetings in 2005 & 2006 with project staff to brief them about the bushmeat issue and the project’s work. The project’s workplan in 2006 concentrates on the public awareness aspects of the project, and we hope to use these connections more fully in the next 5 months.

5. **Collaboration with other initiatives: The project reports that links have been made with initiatives such as CITES Bushmeat Working Group and WCS projects. It would be useful to know if any useful outcomes resulted from establishing these links – with respect to commitment to future collaboration, identification of positive and practical lessons or local and regional level ‘champions’ etc**

Although project-linked DFC staff attend all CITES bushmeat working group meetings and project staff have contributed over the years, both through briefings and direct staff participation, to the PSFE (projet sectoriel Forêt-Environnement), CARPE State of the Forest reports, the Great Ape Conservation and Grasp meetings in Brazzaville, Kinshasa and Paris, to the ‘Strategy Nationale de la Filière Viande de Brousse’ and to all other minor policy meetings the DFC or other organisations have held in Gabon, no clear policy change, nor influence has can really be credited to these initiatives. Future collaboration is always assured and relationships are good, but without the crucial next step of finalising the current legal review of Wildlife laws and working toward political responsibility for implementation of wildlife law enforcement, we are unlikely to see any real benefit from these groups and processes. In many ways, the participation of too many groups and projects in discussion gives an illusion of addressing the issue and can hinder lobbying for real change on the ground. Control of the bushmeat harvest in Central Africa is to an extent a victim of this scenario.

6. **Links to wider policy processes: The previous annual report refers to the Ministry staff review and FESP as significant processes likely to affect the project. What were the outcomes of these processes and any relevant implications?**

The general elections in 2005 resulted in several significant changes to the way both wildlife and the environment are governed.

The Direction of Environment was removed from the Ministry of Water and Forests and a new Ministry of Environment was created. The Minister for the Environment was also named the new Vice Prime Minister, giving this new Ministry a very high profile. Environment was formerly a small department in a small Ministry, so this is a significant change. The Wildlife Department has, as yet, remained in a relatively lowly position within Water and Forests, but many people suspect it will be moved to Environment in the near future and may become more powerful.

The National Parks were put under control of the Ministry of Water and Forests, but a new law about to appear, probably before July 2006, will create a new parastatal to provide the National Parks Management Service (technical services within the Parks), thus this chain of command is unclear. Wildlife Department staff traditionally spent most of their time managing protected areas and so most wildlife initiatives were limited to protected areas. However, they now no longer have a clear mandate within the National Parks so this focus will necessarily change. These changes could well mean that non site-based issues, like national management of hunting, become higher priority within the Department, but at present, 4 months after the elections, the result is actually a lot of confusion about current or future responsibilities and most Directors are unwilling to implement any actions at all, in these circumstances.

Within the Wildlife Department, the only significant change to staff directly linked to this project was the loss of Ernestine Effa Ntsame as Bushmeat Point person and thus our most direct government contact. Ernestine has received a lot of training and been with the project for 5 years, so her reappointment is regretted, however her enhanced capacity to grasp and manage environmental issues adaptively will stand the Department in good stead in whichever new post she takes up (as yet unannounced). The new point person, Anne-Marie Moussavou, is motivated to do well in the post and collaborates well with project staff, in particular her direct counterpart Michel Mbazonga and so in terms of overall capacity building, the move is probably positive for the Department.

7. Partnerships

The relationship between the UK host – the School of Biological and Environmental Sciences of the University of Stirling – and the Gabonese partners has been generally good. The 2 of the 3 UK members of staff spend at least 11 months a year in Gabon and project leader Dr Kate Abernethy has spent at least 7 months a year in the country since the project inception. These close links with the national field staff on the project have helped enormously to strengthen government trust in the project and address any tensions early on, keeping the relationship positive.

Although the high presence of UK staff on site has reaped benefits for project's ease of functioning in country, it has led to administrative difficulties with reporting, in particular financial claims in the UK. It is difficult for host institutions to forward funds overseas without contractual agreements from funders, yet the Letter of Award from DEFRA for year 3 (starting 1 April 2005) only arrived in Stirling in September 2005 – leaving the UK host without financial guarantees for 6 months of operation. Clearly Stirling financial department was unwilling to advance anything but minimal resources in this climate and this created tensions in Gabon, as in-country partners were required to advance the project funds without contract themselves. As project leader, I am at a loss to know how to deal with the uncontracted period between March 31st and the arrival of the next year's letter of award. Although it is stated that the grant continuation is reliant on a satisfactory annual report, multi-year projects cannot wait several months for approval of the report. This seems an administrative point which could be addressed and I have raised it with the Secretariat, although as this project is in its final year, I will not see any resulting administrative change.

Another administrative point that caused difficulties was the March 31st 'end of year' claim this year. This project is in its final year, and thus the award given on 1 April 2005 awards funds meant to support the project until August 2006. In this case DEFRA gave funds

knowing there would necessarily be a carryover of some money to support the 5 months of the next financial year, even though they state they do not allow any carryover between financial years. DEFRA did not differentiate between final and other operating years and required us to predict spending on Feb 28th and report any 'underspend' on March 31st. This is hard to do, as the amount we were required to spend by that date was unspecified and caused a lot of stress as to whether the project would then be cut the 'underspent' money. The required reporting of this was very unclear and as turnarounds are necessarily tight between the Feb 28th claim and the March 31st claim, very good communications between Gabon and UK are required to accurately predict spending and report actual expenses to fit exact award amounts. In Gabon I am lucky to have reasonable access to Internet at only 40 minutes drive away, but I am surprised that this sort of UK – project site reporting is tenable in sites with worse communications. Darwin Initiative projects will become almost impossible to administer correctly in remote places if these procedures aren't made easier as it is rare to have in country partners who can advance funds without contract.

- Collaborations
- The project has actively collaborated with the NGO WCS Gabon, with the Wildlife Conservation Society's 'Wildlife Trade and Hunting' programme run by Dr Elizabeth Bennett, with the Zoological Society of London's Forests and Bushmeat Coordinator (Lyndsay Gale), and with the ecotourism project 'Operation Loango' in Loango National Park (on assessing status for a crocodile conservation plan). Relationships with these other groups have been positive and friendly collaborations, but the only joint initiative on bushmeat trade or harvest control is joint support for the Mobile Anti-poaching Unit which is financed by USAID through WCS Gabon and technically advised by 'Projet Gibier'. I think there is much more scope for combined efforts in the sector and hope that the focus on reporting and policy advance of the next 5 months will help create more productive links between various projects.

8. Impact and Sustainability

The project has a feasible exit strategy in place and will spend the past few months of operation finalising and testing this, such that the Monitoring, teaching and policy elements of the project will have a future beyond August 2006. To perpetuate teaching we are producing a teaching pack for the colleges that we have worked in a working with teaching staff to fund and administer future courses. To perpetuate the Monitoring and database use we have trained Wildlife Dept staff to use the database, installed a copy in their offices and can provide trained staff for data collection if required. To perpetuate the public awareness we are developing a set of media materials for distribution following our uptake trials in 2004-5. These are not yet finalized and will be sent to Darwin in the next few months and included in the final report.

Sustainability has been tested by the loss of a key government staff member, Ernestine Effa Ntsame, who moved to France for personal reasons in early 2006. The project team have been able to adapt to the new Wildlife Dept staff members fairly easily and this event has probably ultimately increased stability and sustainability in the project long term.

Daniel Idiata has been on a sabbatical to complete his Master's degree at Laval university in Quebec and will use the project database and the skills in *MSAccess* he acquired with the project in his dissertation. He will return with a higher qualification, higher profile and more ability to influence policy than at the project's outset. This can only be positive for the political change we hope to eventually effect.

Funds are being sought to maintain project core staff on the bushmeat issue beyond the term of the Darwin Initiative involvement in '*Projet Gibier*'.

9. Outputs, Outcomes and Dissemination

This year, under output 14A, organisation of workshops took the form of a training workshop for socio-economic data collection teams in August 2005. Further to this, a sociological research discussion workshop run by the Macarthur foundation for the 'Parks & People' project in February 2006 also discussed these issues. These workshops concentrated more on

understanding consumers and measuring wealth indicators than previous workshops, which have looked at understanding commercial use of the bushmeat resource.

The entire core team (Olivier Hymas, Michel Mbazonga, Kevin Ndong, Stevens Touladjan, Lysiane Ntsame and Anne Marie Moussavou) will attend a policy workshop in Cameroon in May 2006 to present results and discuss lobbying, policy strategy for non-government bodies and how scientific data can be distributed to policymakers.

Kate Abernethy presented results at the Conference on Great Ape Conservation in Brazzaville in May 2005 (Jean Wickings gave presentation). The Wildlife Director also attended this meeting and was briefed by project staff before leaving. Malcolm Starkey presented a paper at the Zoological Society of London conference on Bushmeat and Livelihoods in September 2005 and Olivier Hymas presented the project results and participated in the 'State of the Forest' international meeting on biodiversity conservation in Kinshasa in February 2006 (output 14B).

The two outputs that we have not delivered on are the 12 newspaper articles and 6 radio broadcasts on the project we hoped to put out as raising public awareness on the subject (outputs 15 and 19). In last year's report I raised the problem of finding media contacts in the UK (and elsewhere outside of Gabon), through which to get the project covered sensitively and we are still working on this. We now have established links with BBC Radio 4 and Natural History Unit producers and National Geographic Society (both TV and magazine departments), though no firm treatments for documentaries have been decided. National staff have given radio interviews to the local station *RTG*. We have been unable to find good newspaper media coverage within the UK, though we have given interviews to the *Agence France Presse*, which resulted in 2 published pieces:

http://www.mg.co.za/articlePage.aspx?area=/breaking_news/breaking_news_africa/&articleid=249958 and

http://www.lintelligent.com/gabarits/articleDEP_online.asp?art cle=AFP51735desgoelli ve0

we are hoping to improve general media coverage in the last months of the project

Verifiable indicators are already available for most of the outputs planned for the entire project lifetime: the data is available in the database and up-to-date (currently to end 2005 and will be updated to July 2006 before the project ends), one publication is in press in *Journal of International Wildlife Law* and another three in preparation, a final curriculum for the database and adaptive management course has been finalised and the materials package will be shortly available to teachers. Several indicators are yet to be completed, but these form the basis of the workplan for the remainder of 2006.

For the last year's reporting period, we have been able to follow our timetable, with the caveat that the monitoring meetings are not yet a cross-institutional forum, but we maintain and active internal discussion process within the Wildlife Department. This situation is extensively discussed throughout this report

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

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
4A/4B	Student training weeks	70 / 12 = 82	40 / 12 = 52	52 / 12 = 64		198
5	Project staff in service training years	13	9	5		22
6A/6B	Other training weeks pro-rata	2	6	3		24

11B	Publications submitted for peer review		1	1	2
12A/12B	Databases established / databases updated	1/1	0/1	0/1	1/1
14A/B	Workshops organised to discuss, use and disseminate results / International conferences attended to present results	0/1	2/2	1/3	3/6
15A / 15C	Media articles / websites	1	1 / 1	2 / 1	4/2
17B	Media networks used for dissemination of results		1		1
19A/B/C	Radio broadcasts local/UK/national	0/0/1	2/0/0	0/0/2	2/0/3
extra	Monitoring office established / maintained in LBV	1/0	0/1	0/1	1/1

- In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website Publications Database. Mark (*) all publications and other material that you have included with this report.

Table 2: Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £
Journal Article	<i>Can taxation contribute to sustainable management of the bushmeat trade?: evidence from Gabon and Cameroon.</i>	Journal of International Wildlife Law		
In press – not yet available, reprint will be supplied to Darwin once	<i>David S. Wilkie, Malcolm Starkey,</i>			

the article is published. *Elizabeth L. Bennett,
Kate Abernethy,
Roger Fotso, Fiona
Maisels, and Paul
Elkan*

10. Project Expenditure

- Please expand and complete Table 3.

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
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11. Monitoring, Evaluation and Lessons

- Monitoring

In the first annual report where this question was posed, several success monitoring indicators proposed. These are restated below, followed by an assessment of this year's performance.

- Adherence to the budget, workplan and achievement of the majority of objectives and outputs.

Generally good success

- Invitation/ attendance of project staff at key national and international meetings on the topic

Good. To our knowledge there have been no national or high profile International (concerning Central Africa) meetings to which project staff have NOT been invited and attended. However, there have been relatively few relevant meetings in the past 12 months.

- Verification of data errors in the database will indicate staff competence in database update and management.

Good. Data collection, entry and verification is now fully carried out by national staff and subsequently reverified using automated checks programmed to the database and random checks from senior project staff. Error rates are declining, though verification is still necessary. Data entry error are <3% of all cells entered.

- Public response to public awareness materials.

This has not been verified this year, though will be intensively looked at in the remaining months media campaign.

- Monitoring database will in future give quantifiable checks of government long term success in managing the bushmeat trade through analysis of trade and consumption figures.

Not yet applicable. This necessarily requires management action planning and implementation. Although this is now happening internally in the Wildlife department Mobile Unit, it will require more partners and greater effort/ resources to see measurable change.

- Lessons learned

The political environment, although stable and positive, still has enormous inertia. Even though there are no clear oppositions or hurdles to the policy reforms we want to encourage, the slowness of the legal revision process and the general unwillingness to take risks close to election times has seriously impeded the policy reforms that the project has been working towards. We need in future to look at the wider political scene and target time frames where the system is likely to be running well for maximum efficiency of lobbying. This though will be incredibly difficult to finesse within the constraints of donor government political cycles and financial periods also!

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2005/2006

Project summary	Measurable Indicators	Progress and Achievements April 2005-Mar 2006	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>(insert original project purpose statement)</i></p> <p><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>(insert original purpose level indicators)</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</i></p>	<p><i>(report impacts and achievements resulting from the project against purpose indicators – if any)</i></p> <p><i>This output has only been achieved within the DFC, we hope to expand database use to other institutions and encourage a wider constituency for the reforms suggested.</i></p> <p><i>This has been achieved. A Final trainers package will be available in the next few months.</i></p> <p><i>This has been done, through 4 Wildlife Dept staff using the database for masters level research on policy. Students have also carried out research, but this is not gov’t mandated.</i></p>	<p><i>(report any lessons learned resulting from the project & highlight key actions planning for next period)</i></p>
<p>Outputs</p>			
<p><i>Nation-wide data on the volume, economics and geographic distribution of the bushmeat trade</i></p>	<p><i>(insert original output level indicators)</i></p>	<p><i>(report completed activities and outcomes that contribute toward</i></p>	<p><i>(report any lessons learned resulting from the project & highlight key actions planning for next</i></p>

<i>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>outputs and indicators)</i> <i>Database is established and widely used. Workshops have been held. Data has been presented at national and international meetings and is starting to be used for management decisions.</i>	<i>period)</i>
<i>Training module for ENEF established</i>	<i>One module taught in academic years 2003/04, 2004/05 and 2005/06.</i>	Students and staff have received training increasing general capacity in the subject.	
<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 implications of research results to policy makers</i>	12 USTM students and 3 ENEF students have completed dissertations using the database and working with project staff this year	
<i>Research results communicated to policy makers and public</i>	<i>At least 12 students undertake bushmeat-relevant research projects and give both written and oral presentations of policy implications of research results to policy makers</i>	Public communication of results has been low this year – 2 radio broadcasts, 2 newspaper articles, a Earth day stand in Okondja, 3 international meetings. The next 5 months will hold more publicity as the project wraps up.	Need more media contacts
<i>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>	To be achieved in next 5 months	Need to finalise publicity. Translation is a very slow component, requiring more time than we initially budgeted.