12-00

Defra Ref: 17



DEFRA Department for Environment, Food & Rural Affairs

## **DARWIN INITIATIVE**

## APPLICATION FOR GRANT FOR ROUND 11 COMPETITION: STAGE 2

Please read the Guidance Notes before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form. Please do not cross-refer to information in separate documents except where invited on the form. The space provided indicates the level of detail required but you may provide additional information on a separate A4 sheet if necessary. Do not reduce the font size below 10pt or the paragraph spacing.

Submit by 13 January 2003

#### 1. Name and address of organisation

Department of Biological Sciences, University of Stirling

2. Project title (not exceeding 10 words)

zapacity building for monitoring and managing the bushmeat trade in Gabon

### 3. Principals in project. Please provide a one page CV for each of these named individuals.

Details	Project leader	Other UK personnel (if working more than 50% of their time on project)	Main project partner or co- ordinator in host country
Surname	Abernethy	Starkey	Idiata Mambounga
Forename(s)	Kate	Malcolm	Daniel
Post held	Research Fellow	Researcher	Chef de Service de la Chasse
Institution (if different to above)	As above	University of Cambridge (at present)	Ministère de l'Economie forestière
Department	Biological Sciences		Direction de la Faune et Chasse
lephone			
Fax			
Email			

## 4. Describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

#### Aims

To pursue research and scholarship at an international level of excellence and provide flexible and innovative programmes of teaching and learning

#### Activities

Delivery of flexible and high quality educational programmes designed to promote the self-fulfilment of students and staff. Support for research at nationally and internationally recognised levels of excellence, meeting economic, environmental, social and cultural needs.

#### Achievements

Department of Biological Sciences, University of Stirling, was awarded Grade 4 in Research Assessment Exercise 2001. Established Centre for Conservation Science (CCS) jointly with St Andrews in 2001.

## 5. Has your organisation received funding under the Initiative before? If so, please give details.

Yes. Darwin Initiative grant No 06/166. 'Forestry Curriculum towards Sustainable Forestry and Conservation of Biodiversity in Indonesia). Reported by Nagy, L, et al., (2002). University of Stirling, Stirling, Scotland. vii 142pp.

## 6. Please list the overseas partners that will be involved in the project and explain their role and responsibilities in the project. The extent of their involvement at all stages in the project should be detailed, including in project development. Please provide written evidence of this partnership.

The Direction de la Faune et Chasse (DFC) of the Ministère de l'Economie Forestière du Gabon (Government Wildlife Department) is the major partner. They have been closely involved throughout a 2 year pilot project to identify needs for management They also fully support the project through their training college (Ecole National ed Eaux et Forets; ENEF) whish will incorporate training in wildlife population management and adaptive management principles into the curriculum.

The Centre International de Recherches Médicales de Franceville (CIRMF) is a gabonese research institute with a mission to carry out research on public health issues. As such they have supported the initiative to manage the bushmeat trade and will continue to do so for the pproposed Darwin project. They will provide staff expertise and time.

The Wildlife Conservation Society in Gabon (WCS) is an international NGO which has worked in Gabon since 1985 and has an established office in Libreville. WCS hads an active global programme on Wildlife Trade issues and fully supports this project tio bring management capacity to the government. They will provide office support in the capital and training support at their Lope training facility.

## 7. What steps have been taken to (a) engage at all appropriate levels within the host country partner organisations to ensure full support for the project and its outcomes; and (b) ensure the benefits of the project continue despite staff changes in these organisations?

All partners have provided written proof of their engagement in the project. Where appropriate, in-kind contributions towards the project have been promised. The DFC will provide a senior staff member to oversee the project; this is a civil service post, and will be maintained permanently throughout and beyond the project. The DFC will also provide 2 junior staff to be trained, in case of absence or removal of the senior staff member. Spreading capacity across many staff will bolster the initiative against the potential disruption of staff losses during or after the project duration. ENEF trains 50 students in wildlife management per year and USTM graduates are also eligible to join the Wildlife Department and bring capacity into the government. After the first 2 yrs, several people at many levels will have the necessary skills for project design, management and use of databases for adaptive

## 8. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities. Please include any contact with the government of the host country not already provided.

The project leader and principal researcher were invited participants at the 'Stratégie Nationale sur la Gestion de la Viande de Brousse' (Strategic Planning for Managing the Bushmeat Trade) workshop held in Gabon in December 2002. This meeting was organised by the DFC and brought together all participants in the current debate on bushmeat trade policy (Government in the form of elected local authorities, local community representatives, Wildlife Department and Ministries of Transport, Health and Agriculture, the police service, forestry industry representatives, members of the research community, environmental NGO's both local and international, and international donor agencies, such as FAO and the US Fish and Wildlife Service). The need for a bridge between research results and policy was highlighted as well as the need for capacity for appropriate research design with the Ministries. This project proposes to tackle these highlighted needs.

## PROJECT DETAILS

9. Define the purpose (main objective) of the project in line with the logical framework.

The purpose of this project is to contribute to the management of the bushmeat trade in Gabon by promoting locally-owned policy-oriented research into both the biological and socio-economic aspects of the trade. The project has the following objectives:

To establish an effective, locally-owned system of monitoring both the biological and socio-economic aspects of the bushmeat trade and to ensure that the Gabonese government has sufficient capacity to interpret the results of monitoring.

To ensure that both the natural science and socio-economic research skills necessary for understanding the drivers of the bushmeat trade are taught to forestry school trainees and to promote high-quality policy-oriented research relevant to managing the bushmeat trade

To raise awareness of the issues involved in managing the bushmeat trade by disseminating research results to a nation-wide audience

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## 10. Is this a new initiative or a development of existing work (funded through any source)?

This project is a new direction, born of existing research. It emphasises the conversion of research results and methodological expertise into adaptive management and capacity in the long term. We are thus seeking support from Initiatives, such as the Darwin, which recognise the need for such capacity and are focussed beyond initial research into applied biodiversity

### 11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD, thematic programmes and/or cross-cutting themes. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.

The Convention on Biological Diversity commits parties to the convention to working towards conservation of biological diversity and sustainable use of its components (Article 1). To this end parties should identify activities that have adverse impacts on biodiversity (Article 7), initiate appropriate research and training to evaluate possible solutions (Article 12), and where necessary regulate potentially harmful activities (Article 8). In Gabon, preliminary studies have clearly identified the negative impacts of the bushmeat trade on biodiversity, and the government has committed itself to regulating the trade. However, there is currently a severe lack of in-country capacity for designing, monitoring and managing policy-oriented research. This project will aid Gabon in meeting its obligations under the CBD by using UK-based expertise to run both in-service and academic training programs to increase the capacity for locally-owned research aimed at identifying mechanisms for regulating the trade. By focusing on policy-oriented research designed, managed and interpreted with the government department responsible for managing the trade, the project will explicitly promote the use of results for active management strategies. By integrating training into the curricula of the two organisations that provide recruits into the wildlife management branches of government, the project will ensure that training continues after the end of the project and will provide a sustainable source of management capacity for

## 12. How does the work meet a clearly identifiable biodiversity need or priority within the host country?

The trade in bushmeat is having a huge impact on fauna throughout the world and the problem is particularly acute in Central Africa. Hunting is cited as the major current threat to most Central African species on the IUCN red data lists and CITES appendices. Overhunting is driving species to local and in some cases regional extinction, and few solutions have been devised let alone implemented. One problem that has delayed action is conflicting politics in balancing biodiversity conservation with development concerns for people whose livelihood currently depends on hunting. Thus elucidation of the way the trade functions and the socio-economic implications of change are imperative for sound action that will lead to long-term acceptance of management for biodiversity conservation measures without livelihood loss for poor communities.

## 13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country

Hunting and trade in bushmeat are important components of many people's livelihoods in Gabon, especially in rural areas. However, pilot research has shown that uncontrolled commercialisation of the bushmeat trade has often led to overhunting, resulting in both declining nutritional standards and reduced income from hunting, and therefore reduced livelihood security for many. Understanding how biological, social and institutional factors interact to result in overhunting is essential for devising and implementing policies to achieve sustainability. This, in turn requires sound socio-economic analysis of the situation. However, the government department charged with managing the trade, and the training centres that supply recruits, have mostly focused on cological research. This has led to a considerable lack of capacity for assessing and reacting to the socio-economic factors that lead to overhunting. By explicitly promoting the integration of socio-economic research within the DFC and the training centres that supply it with recruits, this project will build their capacity for seeking and implementing solutions that achieve conservation of endangered species and enhance the sustainability of legitimate hunting while being sensitive to the rights and needs of rural communities. The 'Sustainable livelihoods framework' developed by DfID and the IDS will form a starting point for teaching socio-economic research methods to ENEF and USTM students.

## 14. What will be the impact of the work, and how will this be achieved? Please include details of how the project outputs will be disseminated and put into effect to achieve this impact.

The impact of the project will be the existence and independence of a management system for the bushmeat resource in Gabon, that protects wildlife for the long term without loss of livelihood for those who can ill afford it. Gabon is in the fortunate position of being a relatively rich country with a low human population density and a large intact wildlife resource. In this aspect, it is in an ideal, and rare position to achieve this goal. The outputs of the project will include:

An up-to-date database of country-wide information on the extent and causes of the bushmeat trade established within the DFC

Curriculum, course guide and training manual in Research for Natural Resources Management produced

Research results communicated to policy makers through presentations by research co-ordinators and students

Analyses of data published in scientific journals; Posters and leaflets detailing research results produced and distributed

Awareness-raising videos based on local research results produced and broadcast on national TV and radio

## 15. How will the work leave a lasting legacy in the host country or region?

The work will have a lasting legacy in the country through the permanent set up of a monitoring team and support office in the capital. This office will be sustained by staff training through the programmes integrated into the curricula of the Universities and colleges supplying management staff in the country over the foreseeable future. Database access will become easy and available to all, thus promoting use of sound data to inform and advise managers and management decisions, not just for this issue, but as the accepted basis for other environmental management problems.

The total structure will allow adaptive management of the bushmeat trade, based on evaluation of actual change in relation to mamagement strategy, for the future in Gabon. This management style will give the country the best chance of preserving both its wildlife and wild meat resource for the future.

## 16. What steps have been taken to identify and address potential problems in achieving impact or legacy?

The greatest potential problem would be the loss of continuing political and popular support for proactive management of biodiversity, especially through the curtailing of uncontrolled hunting. We intend to avoid this by careful attention to public awareness campaigns and by involvement of both government and NGO staff at all levels of the project from the very beginning. Other consequential problems are the lack of staff of sufficient calibre to implement project activities. We will address this by instigating training courses in the Universities and Colleges for which entrance requirements and pass requirements can be enforced, ensuring high quality and consistent staffing for the future.

## 17. How will the work be distinctive and innovative? How will the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?

The work is innovative in that it specifically addresses the gap between research and management. Much research fails to bridge this gap and thus sound scientific recommendations are not successfully translated into policy. This may be through unfamiliarity with host country political systems or because local partners were not sufficiently involved in the project. This project will avoid these pitfalls by involving host country staff at all levels from the beginning of the project and by employing UK staff familiar with Gabon, its language and culture..

The monitoring office within the DFC will bear the Darwin Initiative name and logo. The logo and acknowledgment of funding and support will also be displayed in the website if databases can be made accessible through the Ministry site. Links can be made to Darwin Initiative sites wherever appropriate. All materials developed for training curricula in the Universities and colleges will bear the Darwin name and logo. All reports, working papers, scientific publication and public awareness documents, including television reporting, will acknowledge Darwin funding and cite the Darwin name, and if appropriate will display the logo.

# 18. Are you aware of any other individuals/organisations carrying out similar work? Are there completed or existing Darwin Initiative projects which are relevant to your work? Please give details, explaining the similarities and differences. Show how the outputs and outcomes of this work will be additional to any similar work, and what attempts have been/will be made to co-operate with such work for mutual benefits.

No other projects aimed at management of the bushmeat trade currently exist in Gabon, though the EU supports a project to provide alternative meat sources through animal raising.

The Darwin project 'Conservation biology and genetics of the western lowland gorillas in Gabon, Ref #08/044, was carried out in Gabon from 2000-2002. This project also engaged with the teaching colleges and successfully initiated a Biodiversity Conservation curriculum at the Science university. The current project will build on this foundation by adding practical courses in management and is confident of a good working relationship with these Gabonese teaching institutions.

Other Darwin projects have addressed wildlife trade issues in Asia and East Africa, but none in Central Africa. The completed Darwin project Sustainability of Wildlife and Rattan Trades in North Sulawesi (Darwin initiative project 162/05/127) addressed issues of the sustainability of hunting and the methodological and practical insights afforded by that study will be incorporated into the training and research initiated by this project. We have been in touch with the project leader (E.J.Milner-Gulland) throughout 2002 to discuss a broad picture of methods and research on bushmeat issues in Gabon.

The Tropical Forest Forum's Bushmeat Working Group, the Bushmeat Crisis Task Force, The EU bushmeat Campaign and the IUCN CITES bushmeat working group will provide fora for us to receive feedback on the project from others working on similar issues and also to publicise the this project's experiences so that others can benefit from the experiences gained.

19. Will the project include training and development? Please indicate who the trainees will be and criteria for selection. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?

Training will be a core component of the project at several levels. In order to generate a sound basis for management decisions, scientific training in design, methods, analysis and interpretation of data are required for the monitoring teams. However, as no current structure exists for adaptive project management, training is also required at managerial levels in database use, organisation, accounting, human resource management and planning.

Trainees for monitoring teams will be selected from Wildlife College (ENEF) and Science University (USTM) graduates, through a competitive interview process based on qualifications, motivation and career objectives. Trainees for managerial positions will initially be picked from DFC staff, through an internal competition for the posts.

Training courses presently envisioned will take 3 formats a) scientific courses within degree curricula at the Wildlife college aimed at better understanding of theory and objectives b) specialised shorter courses for project staff in methodology, data management and statistical interpretation and management issues. c) Training of trainers: involvement of senior staff and teaching staff in the DFC in the use of the databases, evaluation of monitoring staff outputs and design of future training. The curricular courses will necessarily be taught within the academic years (Oct –June annually), starting in Oct 2003. The specialist courses will be residential courses of 2-4 weeks duration held at intervals throughout the project, starting with a database management course at the WCS Lopé Training Centre in July/August 2003. Subsequent courses will be determined by staff needs. Senior staff and teaching staff training sessions will be linked to the organisation committee: six monthly meetings of 1-2 days each.

Monitoring teams and management staff will all receive further in-service training, which will allow them career progress. Senior taff will also be involved in training of younger staff. Staff will receive annual evaluations to assess the impact of any training they have received. The DFC and the project leader will assess these evaluations, in order to best plan further recruitment and inservice training.

The 'acid test' of the training impact will be in the successful use of the data for management. The six-monthly planning meetings for management decisions will necessarily look at the quality of data collection and the efficiency of actions taken. If data quality is high and actions taken are reducing impacts on biodiversity and increasing sustainability of resource use, then staff training must be deemed efficient. Data quality will be assessed through a) collection of adequate sample sizes for sufficient statistical power b) appropriate precision of measurement c) low rate of errors in data entry d) ability of the data to inform decisions for management. Appropriate management actions will ultimately be assessed against the goal of conservation of biodiversity and sustainable development. Short term indices may be a) Was the management strategy determined by correct interpretation of the data? Do the data show that the action decreased over-hunting? Were socio-economic impacts of this management strategy correctly assessed before and after the action? Have sufficient safeguards to protect fragile communities been used? Is the management strategy sustainable (financially, politically etc.) or will it require modification after an initial goal is achieved? Some actions may be short-term crisis measures; others may be long-term projects, such as education in schools.

## 20. How are the benefits and/or work of the project expected to continue after the end of grant period? Please provide a clear exit strategy.

During the grant period, in-service training will be given to existing staff, such that by the end of the grant period, the monitoring network, its management and the database office can function independently of input from the project leader or project researchers. The Ministry have committed 3 staff to the project on permanent salaries and new staff will have been trained through the college programmes before integration to the civil service.

Regular meetings to debate interpretation and use of the monitoring results will have been instigated and carried out through the 3year project period (3-6 meetings). During these meetings, an monitoring committee of 6-8 members will be named, ideally including permanent staff from the DFC, advisors from the scientific community in the country and independent representatives of the community. This committee will be given the task of organising future meetings beyond the end of the project, and the minor finances required for the continuation of this committee will be sought during the project.

The existence of the computer hardware, office and permanent staff will ensure ongoing use of project results for management. Training curricula and materials will be given to the wildlife colleges and integrated into their standard teaching of courses in Conservation Biology and Wildlife Management, by existing staff

During the final year of the project, scientific training of the monitoring team will be complete and Darwin staff will spend a higher proportion of their time focussing on training aspects relevant to management of the monitoring programme. This will include ensuring the set-up, organisation and accountability of the above organisational committee, putting in place recruiting strategies between the colleges and the DFC. Promotion of regular interaction between the DFC and other NGO's and creation of links between DFC staff assuring the trade management and Gabon's national representation on committees such as the CITES Bushmeat Working Group (based in Yaoundé), the Bushmeat Crisis Task Force (based in Washington) and the EU Bushmeat Campaign (London). The national managers participating in these committees should in particular be well informed of project progress, results and lessons learned.

## 21. Provide a project implementation timetable that shows the key milestones in project activities.

	ntation timetable
Date	Key milestones
July 2003	Begin project. Hire monitoring team and establish office in Libreville with project team.
Aug 2003	Monitoring team in place with workplan finalised for monitoring and data collection underway
Sept 2003	Database in place, desktop computer station set up in Libreville. 'Training of trainers' workshop for senior staff and teachers in Libreville on the uses of the databases. More intensive in-service training of DFC project staff begins on database management.
Oct-Nov 2003	First report to Darwin Initiative. Research assistant recruited and begins training. 2 <sup>nd</sup> Training of Trainer workshop with teaching staff in DFC/ENEF to discuss integration of courses into spring timetable.
Jan 2004	<u>First meeting of monitoring committee.</u> Establishment of membership and objectives. Analysis of last 6 months data and decisions on DFC action to be taken. Database office accessible for external consultation.
Feb-March 2004	First Course materials for students finalised and printed.
April – June 2004	Second report to Darwin Initiative. Courses taught in management at wildlife college.
July 2004	<u>Second meeting of monitoring committee</u> to look at and interpret last 6 months data and compare with 2003 data trends. Recommendations to DFC (and to Darwin) in form of a 1st working paper. Update of database for consultation in DFC.
August 2004	Training of DFC staff and project coordinator in PC publishing of printed publicity materials. 1 <sup>st</sup> year of BSc Student projects underway supervised by technical advisor, research assistant and DFC staff.
October 2004	Third report to Darwin. New academic year, evaluation of management curricula, project success and revisions of materials. First scientific publications planned.
Jan 2005	<u>Third monitoring committee meeting</u> , analysis of database results, evaluation of current management actions, and accessibility of information. recommendations to DFC for changes in management. Update of database for consultation.
Jan 2005	First 2 papers prepared and submitted for review in scientific journals
Feb 2005	Production of revised course materials and leaflets on monitoring results.
Feb-march 2005	Short course in adaptive management and use of databases for DFC staff, and Easter vacation course in databases use for students at Lope.
April 2005	Fourth report to Darwin. Second year of teaching in wildlife colleges. DFC project staff (project coordinator and Chef de Service de la Chasse) begin liaison with TV and radio media to create programmes on the bushmeat issue using results and experience of adaptive monitoring.
July 2005	<u>Fourth monitoring committee meeting</u> followed by wider 1 day workshop meeting in Libreville (organised by DFC) to discuss progress with other stakeholders : law enforcement authorities, local communities etc and encourage consultation and understanding of databases. Results and recommendation in form of 2 <sup>nd</sup> DFC working paper. 2 <sup>nd</sup> year BSc student projects begun.
Oct 2005	Fifth report to Darwin. New academic year, curricula and student performances evaluated and recommendation for revision of materials. Radio and TV broadcasts prepared for comment/revision from
Jan 2006	partners. <u>Fifth meeting of monitoring committee</u> . Discussion of progress, appropriate timing of future committee meetings, efficiency of use of the data. Funding for future meetings. Revisions to be made. Media information
March 2006	campaign launched. Final curricula established and printed for colleges. Final short course in data analysis for senior management and teaching staff. Short training course for teaching staff.
April 2006	Sixth report to Darwin. Third course of teaching to wildlife college. Materials given to teaching staff.
July 2006	Sixth monitoring committee meeting. Third working paper produced by DFC and disseminated to other working groups. Monitoring committee membership and programme established for future. Database officially
August 2006	under sole management of DFC monitoring committee.
Oct 2006	Second round of 2 scientific publications prepared and submitted.
	Final report to Darwin.

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## 22. How will the most significant outputs contribute towards achieving the purpose of the project? (This should be summarised in the Log Frame as Indicators at Purpose level)

The tangible outputs of the project will be in human resources, digitally available databases, printed materials and other media. Capacity in human resources will be created at three levels a) a senior staff at management and teaching level within the Ministry able to use and teach others in creation and use of databases and techniques of adaptive management b) a junior staff using databases for management on a daily basis and able to facilitate their use by members of the public for a wider comprehension of the issue and c) a survey team of monitors in bushmeat markets established and collecting data that is appropriate to inform managers. This network of people will enable good data to be collected and used efficiently and quickly for just management decisions aimed at protection of wildlife and sustainable management of bushmeat harvests; the overall project goal. The multi-layered structure will ensure that capacity is buffered against staff turnover and losses. Printed teaching materials will be a key element to train future staff for the network.

Multi-media public education materials and working paper outputs will help to bring a broader understanding of the issue to the public and gain popular and political support for management decisions, which will increase their long-term impact and success.

PROJECT OUT	TPUTS	
Year/Month (starting April)	Standard Output Number (see standard output list)	Description (include numbers of people involved, publications produced, days/weeks etc)
August each year	4A/4B	30-60 gabonese undergraduates receive courses in wildlife population management, statistical analysis and database use. 3 hours per week for 10 weeks = 1 training week <i>pro rata</i>
Each year	5	8 gabonese staff (3 graduate and 5 junior) to have received 1 year in service training on data collection and use for adaptive management
Oct each year	6A/6B	4 gabonese teaching staff from wildlife colleges to have received training in new curriculum. Senior gabonese environmental management staff to have received one week workshop training in database use. 3 weeks <i>pro rata</i> in short courses and in-service teaching for a total of 7 senior staff.
July 2006	7	2 training materials (course handbooks, CD training on databases)
July 2006	8	80 weeks total spent by project leader in Gabon
July 2006	9	Adaptive management plan for the bushmeat resource developed for DFC in form of 3 working papers
Jan 2005	11B	2 papers to be submitted to peer reviewed journals
Jan 2004 (updated until Jul 2006)	12A/12B	First database of statistics and analysis on current bushmeat trade to be established and available for use by DFC. One integrated database will contain information on commerce, socio-economics and ethnographic data.
uly 2006	11A/11B	2 papers submitted in 05 have been published, 2 further papers submitted.
Each year	14A	2-3 workshops (1/6 months and extras) organised to discuss, disseminate and use results
Oct 2006	14B	3+ international conferences (1 per year) attended to present results directly
Each year	15A/15C	12 (monthly) short press releases in national press in UK and Gabon and on project website (linked through all partner websites) NB. Gabon has only national media - there are no local station or newspapers.
Jan 2004	17B	Current DFC distribution network for information to be enhanced and extended to release working papers and public information leaflets.
Jan-Dec 2006	18A/18C	4-6 national TV documentaries/ information programmes based on project experience and results. NB. Gabon has only national media - there are no local stations or newspapers.
July 2004 onwards	19A/19C 19B	6 radio programmes (10-30 minutes each) on project results. 1 radio programme (BBC radio 4 or World Service if possible) in UK
July 2006	20	£5,000 of computer equipment Darwin funded, (£10,000 project total).
July 2006	21	One permanent active and interactive public database. Permanent university courses in wildlife population management, database use and statistics.
July 2006	22	Approximately £200,000 (including TV and radio participation)
Jan 04 onward	extra output	Permanent monitoring office established in Libreville

### 23. Set out the project's measurable outputs using the attached list of output measures

## MONITORING AND EVALUATION

## 24. Describe how the progress of the project, including towards delivery of outputs, will be monitored and evaluated in terms of achieving its overall purpose. This should be both during the lifetime of the project and at its conclusion. Please make reference to the indicators described in the Logistical Framework.

The database output will be monitored by the DFC and evaluated by all partners through the monitoring committee described in section 20. This committee will have reference to the project milestones and overall goal in order to judge progress within the project framework, and towards overall change. Problems and their solutions will be discussed by the monitoring group and responsibility for ensuring action is taken will be given to appropriate project and ministry staff. Six-monthly reports will be made to the Darwin Initiative, the Government and other partners, ensuring their surveillance of contributed staff time and performance.

Progress in teaching will be monitored in conjunction with the colleges' own assessments (exam passes and successful completion of curricula). The results will be communicated to the project leader and discussed with the project partners at regular meetings. Problems arising from low student performance will be addressed using the existing teaching structure: revision of class material, resit examinations or failure of courses for certain students. Both these evaluation systems are continuous and external to core project staff, and thus are assured to extend permanently beyond the project.

## 25. How will host country partners be involved in monitoring and evaluation of the project?

The DFC will be the major partner in the implementation of monitoring of progress. Regular meetings of the monitoring committee will ensure involvement of partners in the use of the data for management and will give a chance for other partners to assess DFC performance in the implementation and achievement of the overall goals of the project. Other partners will monitor outputs in training through the successful integration of the training courses into their curricula or by the distribution of information to the public. The Universities and colleges retain responsibility for their overall curricula and for the intake and subsequent performance of their students in all subjects. They will thus retain oversight not only of the existence, but of the quality of training from the Darwin project.

## 26. How will you ensure that the project achieves value for money?

The project will only achieve value for money if the monitoring network can show, through real data in the field, that management strategies have been successfully adapted to needs and that the primary objectives are being achieved a) the protection of intact communities and viable populations of wildlife b) reduction of overhunting for profit c) protection of traditional livelihoods for those dependant on hunting (in the long term this may be achieved through promotion of alternative livelihoods). If the project can achieve these objectives, deliver the outputs proposed and leave an independent system for future adaptive management of the resource, then we will have achieved value for the money spent

## 27. Reporting Requirements. All projects must submit six monthly reports (by 31 October each year) and annual reports (by 30 April each year). Please check the box for all reports that you will be submitting, dependent on the term of your project. You must ensure that you cover the full term of your project.

Report type	Period covered	Due date	REQUIRED?
Six month report	1 April 2003 – 30 September 2003	30 October 2003	Yes
Annual report	1 April 2003 - 31 March 2004	30 April 2004	Yes
Six month report	1 April 2004 – 30 September 2004	30 October 2004	Yes
Annual report	1 April 2004 - 31 March 2005	30 April 2005	Yes
Six month report	1 April 2005 – 30 September 2005	30 October 2005	Yes
Annual report	1 April 2005 – 31 March 2006	30 April 2006	Yes
Six month report	1 April 2006 – 30 September 2006	30 October 2006	Yes
Final report	1 April 2003 – project end date	3 months after project completion	Yes

## LOGICAL FRAMEWORK

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28. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Project summary	Measurable indicators	Means of verification	Important assumptions	
Goal:				
in biodiversity but poor ir the conservation the sustainable u	evant to biodiversity from within th a resources to achieve of biological diversity, se of its components, and able sharing of the benefits arising			
Purpose Purpose: To enhance the capacity of the Gabonese government to manage the bushmeat trade to maximise long-term ildlife survival as well as the sustainability of local traditional livelihoods	Network of monitors in bushmeat markets established and data used iteratively in adaptive policy development via regular evaluation workshops. Module in 'Research for Natural Resources Management' for ENEF, and USTM developed. Policy-oriented research on bushmeat issues carried out by the government, results publicly	Data from 1st year of monitoring analysed and reported in the scientific press. Conclusions used in design of management policy during 2 <sup>nd</sup> year. Curriculum, course guide and training manual produced. Courses taught. Students complete research dissertations	Continuing favourable policy environment in the DFC. Continuing support of ENEF and other tertiary education establishments. Sufficient students enrol in course. Calibre of student body is appropriate.	
Outputs Nation-wide data on the	available in a user-friendly Database of trade and socio-	Data summarised in annual	Continuing favourable policy	
volume, economics and geographic distribution of the bushmeat trade available to policy makerseconomic monitoring data established and managed within the DFC. Regular workshops held to interpret results.One module taught in academic	reports. Computerised database accessible to policy makers. Summary reports of annual trends published as DFC	environment facilitates collection of data. DFC provides office or website space for public database consultation Continuing support of ENEF and		
Training module for ENEF established Policy oriented training relevant to managing the shmeat trade	ed training aging the 2005/06. At least 12 students undertake bushmeat-relevant research projects and give both written and oral presentations of policy implications of research	others for bushmeat-relevant research. High proportion of students complete research projects to a sufficient scientific standard		
completed by ENEF students Research results communicated to policy makers and public	results to policy makers Posters displayed in prominent locations. Leaflets distributed in major cities. Videos shown on national television	Research dissertations submitted and copies sent to Darwin Initiative and DFC Key results reported in scientific press and journals	Policy makers remain open to implications of research findings DFC staff complete training in presentation and layout software.	
Activities Monitoring	Activity Milestones (Summary of Project Implementation Timetable) Monitoring protocol established; network of monitors in bushmeat markets in place by and database manager trained and database set up in DFC by end Sept. 2003. Protocol for bushmeat consumption monitoring devised by end 2003, consumption monitoring to take 3 mths/year for each year of project. 1 <sup>st</sup> yr of data analysed by end Oct. 2004. Workshop to discuss interpretation and use of results by Dec 2004. 2 <sup>nd</sup> year of data analysed by end Oct. 2005. First policy recommendations Jan 2005 and annually thereafter. First scientific publications submitted by end Dec. 2005.			
Training	Training of DFC staff will be on-going throughout the project. Database training completed by end Sept 2003. Specialist presentation skills training for publicity material commences 2004. First 'training of trainers' workshop held in by end Oct. 2003. 2 <sup>nd</sup> 'training of trainers workshop held by end 2003. Curriculum, course guide and training manual for higher education produced by end Feb. 2004. One module of training & student research projects completed in 2004-05-06. Annual curriculum revision.			
Publicity material and awareness raising	DFC 'Publicity Officer' completes training in producing publicity materials by June 2004. Posters and leaflets produced by September 2004 and distributed by end 2004. Publicity Officer completes training in video production and liaises with national TV during 2005. Videos/TV clips broadcast nationally in			

## FINANCIAL ASPECTS

• Please state costs by financial year (April to March). Use current prices - do not include any allowance for assumed future inflation. For programmes of less than 3 years' duration, enter 'nil' as appropriate for future years. Show Darwin funded items separately from those funded from other sources.

Table A: Staff time. List each member of the team, their role in the project rate and the percentage of time each would spend on the project each year.

	2003/2004 %	2004/2005 %	2005/2006*** %
United Kingdom project team members and role	July-March	April- March	April-June
Project leader (Kate Abernethy)	40	40	40
Principal researcher/technical advisor (Malcolm Starkey)	60	*60/30	30
Graduate research assistant (to be recruited)	60	**60/100	100
* 60% effort until end June 2004, 30% effort thereafter			
** 60% effort until end June 2004, 100% effort thereafter			
*** Year 3 costs are for the remaining 15 months of Project			
Host country/ies project team members and role			0
Directeur de la Faune (Adrien Ndoungou)	5	5	5
Chef de Service de la Chasse (Daniel Idiata)	75	75	75
Project coordinator (Ernestine Ntsame Effa)	0	100	100
Directeur de l'Ecole des Eaux et Forêts (Samuel Ikogo)	5	5	5
Professeur de Biologie et Conservation	20	20	20
Directeur d'Etudes, WCS Centre de Formation	20	20	20
Monitoring team staff (5 people)	100	100	100
			L

Table B: Salary costs. List the project team members and show their salary costs for the project, separating those costs to be funded by the Darwin Initiative from those to be funded from other sources.

Disiset team member	2003/2004 £ (July 03 - March 04)		2004/2005 £ (April 04 - Mar 05)		2005/2006 £ (April 05 - Jun 06)	
Project team member	Darwin	Other	Darwin	Other	Darwin	Othe()
Team leader						
Researcher and technical						
Research assistant		12				
Monitoring team staff						
Directeur de la Faune et Chasse	-		1		[	
Chef de service de la Chasse				14		
Project coordinator						
College teaching staff	Î.				Î.	
Training centre director					Ĩ	
TOTAL COST OF SALARIES						

Note: Year 1 costs cover the first 9 months, and Year 3 costs cover the remaining 15 months of the project

## Table C. Total costs. Please separate Darwin funding from other funding sources for every budget line.

	2003/2004	2004/2005	2005/2006	TOTAL
Rents, rates, heating, lighting, cleaning, overheads				
Darwin funding				
other funding				
Office costs e.g. postage, telephone, stationery				
Darwin funding				
other funding				
Travel and subsistence				
Darwin funding				
other funding				
Printing	2			1
Darwin funding				
other funding				
Conferences, seminars etc				
Darwin funding				
other funding				
Capital items/equipment (please break down)				
Darwin funding Desktop computer, laptop computer, printer software and accessories				
other funding				
GPS units 2 laptops				
Other costs (please specify and break down)				
Darwin funding Medical Insurances Accident insurance				
<ul> <li>other funding</li> <li>Medical Insurances</li> <li>Building and equipment insurances</li> </ul>				
Salaries (from previous table)				
Darwin funding				
other funding				
TOTAL PROJECT COSTS				
TOTAL DARWIN COSTS				
TOTAL COSTS FUNDED FROM OTHER SOURCES				

Mainstream SHEFC funding for teaching and research, plus generated research grant income.

30. Provide details of all other funding sources identified in Question 29 that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional funding the project will lever in to carry out additional work during or beyond the project lifetime. Indicate those funding sources which are confirmed.

The organisation currently receives from CIRMF in support of Dr. Abernethy's position. This funding has been provided for the last 20 years and is confirmed for the future. This will support the salary of the Team leader throughout the project. The team leader is thus able to lever funds that do not pass through the University for functioning of the project, infrastructure and materials that will not be bought as capital costs of the project (i.e. vehicles, some computer capacity, office space, accommodation as well as staff time). Direct funding for the project running costs will also be levered from CIRMF, WCS and the Government of Gabon and potentially other sources identified during the three-year duration.

Funding from the Government of Gabon (DFC/ENEF) will be integrated into civil service posts and office space and will continue beyond the duration of the project.

## 31. Please give details of any further resources sought from the host country partner institution(s) or others for this project that are not already detailed in Questions 29 and 31. This will include donations in kind and uncosted support e.g. accommodation.

Donations in kind are promised from the DFC in the form of staff posts, office space and logistical support. WCS-Gabon will support student accommodation, travel and subsistence during training courses at their Lope Training centre and will provide office services in Libreville. CIRMF will provide logistical support and laboratory expertise, should it be required.

TV and radio stations will be approached to provide programme making through collaboration with the project, rather than as paid contracts. This approach is a standard practice and gabonese national TV and radio (RTG) runs an environmental series of fortnightly TV and weekly radio documentaries on this basis that will be used for radio and television publicity.

UK stations will also be approached for collaborative programming on the bushmeat issue

32. Please separately indicate in Table D the amounts of grant requested under the Darwin Initiative and any confirmed funding/income from elsewhere (where these may be costed). Add together to show total project costs.

#### Table D Darwin funding request

	2003/2004	2004/2005	2005/2006
Amount of Darwin Initiative funding requested	45,649	53,445	63,423
+ Funding/Income from other sources	47,777	51,504	54,830
= Total project cost	93,426	104,949	118,253

### **33. FCO NOTIFICATION**

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country

### **CERTIFICATION 2003/04**

On behalf of the company

l apply for a grant of £45,649 in respect of expenditure to be incurred in the financial year

ending 31 March 2004 on the activities specified in paragraphs 21 and 23.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

I enclose a copy of the organisation's most recent audited accounts and annual report, CVs for project principals and letters of support.

Name (block capitals)	JULIA CAMPBELL
Position in the organisation	RESEARCH FUNDING SUPPORT OFFICER

Signed

Date:

9<sup>TH</sup> JANUARY 2003

Please return completed form to Defra by <u>13 January 2003</u> by e-mail to <u>darwin@defra.gsi.gov.uk</u> or in paper form to Zone 4/A2 Ashdown House, 123 Victoria Street, London SW1E 6DE.

