



Submit by 21 January 2005

**DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 13 COMPETITION:STAGE 2**

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Keep within word limits.

**1. Name and address of organisation**

<b>Name:</b> Fauna & Flora International	<b>Address:</b> Asia Pacific Programme, Great Eastern House, Tenison Road, Cambridge, CB1 2TT
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**2. Project title (not exceeding 10 words)**

Building University Capacity to Train Future Cambodian Conservationists
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**3. Project dates, duration and total Darwin Initiative Grant requested**

<b>Proposed start date:</b>	<b>September 2005</b>		<b>Duration of project: 3 years</b>		
<b>Darwin funding requested</b>	<b>Total</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>
	£ 154,484	£ 29,935	£ 49,476	£ 49,476	£25,597

**4. Define the purpose of the project in line with the logical framework**

To build capacity in conservation and applied research at Cambodia's premier universities, chiefly by establishing new teaching modules and diploma in conservation biology, supported with practical field experience.
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**5. Principals in project. Please provide a one page CV for each of these named individuals**

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner or co-ordinator in host country
Surname	Daltry	Traeholt	Neth
Forename (s)	Jenny	Carl	Dr. Barom
Post held	Team Leader	Chief lecturer and course developer	Vice-Rector
Institution	Fauna and Flora International	Fauna and Flora International	Royal University of Phnom Penh
Department	Cambodia Programme	Cambodia Programme	
Telephone			
Fax			
Email			

**6. Has your organisation received funding under the Darwin Initiative before? If so, give details**

FFI has previously received the following Darwin Initiative grants: Protected Areas Management Planning in the Andaman Islands, India (1997; 162/06/173); Tabunan Forest Biodiversity Conservation Project, Cebu, The Philippines (1998, 162/07/149); Re-starting Management of Sapo National Park and Creation of Liberian Protected Areas System (2000; 162/9/15); Research, survey and biodiversity planning on the Tibet-Qinghai Plateau, China (2000; 162/10/009); A National Strategy for Sustainable Use in Dominica (2000; 162/10/010); Community-based conservation of Hoang Lien Mountain Ecosystem, Vietnam (2000; 162/10/011); and Institutional Strengthening and capacity for Guyana's protected areas system (2002; 162/11/016); Developing a model for the conservation of Croatia's grassland biodiversity (2004; 162/13/004) Community Conservation and Sustainable Development in the Awacachi corridor, Ecuador (2004, 162/13/005) Establishing community-base forest biodiversity management at Sapo Park, Liberia (2004, 162/13/008).

**7. IF YOU ANSWERED NO TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)**

<b>Aims (50 words)</b>
<b>Activities (50 words)</b>
<b>Achievements (50 words)</b>

**8. Please list the overseas partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.**

**Royal University of Phnom Penh (RUPP):** Actively involved in project design (20 students are already involved in joint FFI projects) and will provide office space, room for a reference collection and library, training facilities, students and project counterparts.

**Ministry of Environment (MOE) and Ministry of Agriculture, Forestry & Fisheries (MAFF):** Selected staff will take part in the new teaching modules, and up to 10 will be selected as 'Darwin Scholars' to conduct special conservation research priorities. Furthermore, MOE and MAFF play a significant role in coordinating and undertaking complimentary field surveys where students can take part as part of the study curriculum.

**Other partner organisations in Cambodia:** In addition to FFI's existing conservation and research projects, we hope that some students will gain practical experience by working alongside British experts on projects managed by Conservation International, WWF or BirdLife International.

**9. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities? Please include details of any contact with the government not already provided.**

Since the project does not target one specific area with one or more particular local communities the project will not liaise directly with local communities per se, however, "Darwin Scholars" that are assigned to conduct research in areas with local communities will make the necessary steps for collaboration with local stakeholders.

**PROJECT DETAILS**

**10. Is this a new initiative or a development of existing work (funded through any source?) Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar**

**work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.**

There are no other Darwin supported projects in Cambodia at the moment. In November, 2003, DANIDA started a similar project known as USEPAM that focuses on developing a curriculum for environmental science at RUPP. This course is an undergraduate programme. FFI Cambodia Programme has collaborated actively with the USEPAM project by giving lectures, and to date has entertained more than 60 students on various field surveys, giving them basic first hand knowledge of the practical aspects of conservation biology.

This project seeks to build on the USEPAM model. Whereas USEMPAN focuses on teaching at *undergraduate* level, i.e. only providing students with basic environmental knowledge, it is largely regarded as an entry course to building university capacity at RUPP and analytical capacity in particular is still largely missing. It is expected that many of the students that have followed the USEPAM basic course will be eligible to continue their studies at a higher level, however, at the moment there is no such opportunity at RUPP. This project will focus specifically on building analytical capacity at *graduate* level combined with the training and assignment of 15-20 full time junior research officers (Cambodian nationals). It is anticipated that the sustainability and long term impact of the project will be improved significantly. Cambodian junior research officers trained by the project are expected to carry on the legacy of lecturing new students as well as conducting relevant research in Cambodia in the future.

**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 (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. 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.**

By strengthening of the capacity of Cambodian researchers at university level and amongst local authorities with the responsibility of natural resources management (Ministry of Environment and Ministry of Agriculture, Fisheries and Forestry) the project will support the Royal Government of Cambodia in implementing Articles 5 (5%), 6 (5%), 8 (5%), 10 (5%), 12 (25%) and 13 (5%) of the Convention of Biological Diversity, with particular emphasis on Biodiversity and Tourism (5%), Forest Biodiversity (10%), Inland Waters Biodiversity (10%), Protected Areas (10%) and Sustainable Use and Biodiversity (15%) themes.

**12. How does the work meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with National Biodiversity Strategies or Environmental Action Plans, if applicable.**

Currently, Cambodia is a country undergoing a significant transition from civil unrest to a democratic and peaceful nation. Therefore, the judiciary and subsequent legislative issues are still incomplete. However, some of the most significant initiatives taken by the Royal Government of Cambodia (RGC) to protect and manage its natural resources in a sustainable manner are:

- On 9 February 1995, Cambodia ratified the Convention on Biological Diversity (CBD). The Ministry of Environment views the CBD as a framework to achieve sustainable development through the sustainable use and protection of biodiversity.
- Cambodia's National Environmental Action Plan (NEAP) was approved by the Council of Ministers in December 1997.
- Cambodia became a signatory to ASEAN in April 1999. ASEAN has called for measures to combat climate change and ozone depletion, protect ocean and marine ecosystem from pollution, protect freshwater resources, ensure sustainable management of all forests and conserve biological diversity.
- The two Royal Decrees with most relevance to biodiversity management, use and protection, are the Royal Decree on the Development of the Ministry of Environment (1993), which gave the Ministry of Environment a broad mandate to protect the natural resources of the country and to prevent environmental degradation; and the Royal Decree on the Creation and Designation of Protected Areas (1993), which is specifically involved with the responsibility for supervising the development and protection of natural areas, including the protection of environment, land, forestry, wetland and coastal areas.
- Cambodia signed the CITES Convention in December 1975, but did not adhere to it until 1999.

While this shows that the RGC has taken serious steps towards sustainable development they are unable either to adhere to or implement a large amount of their stated commitments. This is mainly due to inadequate capacity within the environmental and educational sector as well as due to financial limitations.

This project seeks to support the educational sector at a level that increases the availability of qualified nationals within the environmental and biodiversity conservation sector.

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

The project will not focus on sustainable livelihoods per se, however, several of the Darwin Scholars will be assigned research topics that deal with community development, human-wildlife conflict and ecotourism. These projects will have strong emphasis on sustainable livelihoods.

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

The project seeks to:

- Develop certificate level module curriculum and *exams*, and conduct lectures in applied research, conservation biology and natural resource management. The courses are also available to Government staff in the natural resource sector ensuring a broad public participation. Subsequently, 15-20 of the best performers will be selected and offered positions as full time “junior research officers” at the host university. They will be assigned research projects that deal with contemporary Cambodian conservation issues. Lecturing duties will be gradually handed over to these officers who are expected to work independently after the project period.
- Develop applied research projects that are integrated with existing FFI and government conservation projects, other international NGOs, and international development projects (thereby sharing costs and expertise), ensuring long-term sustainability.
- Prepare reference collection facilities, including designing and initiating a database system, procure necessary storage and preservation equipment and materials, train curators and collect and identify specimens collected during fieldwork by the students and “Darwin Scholars”. The reference collection will be established before the end of the project and will be one of the key infrastructural legacies by the project.
- Initiate a small library of books, papers and reports relevant to the study and conservation of Cambodian biodiversity (linked to the database system) and train librarians. The library will be functional before the end of the project.
- Found the Cambodian Journal of Natural History, including creating an editorial committee, designing layout and volume format, set up a reviewer network and publish the first round of papers.
- Promote Cambodia and the Royal Universities for national researchers and students, and encourage other British institutions to develop student exchange programmes.

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

The project will help train new conservation biologists and natural resources managers at an international level. It is anticipated that a significant number of these graduates will take up positions in the two Government authorities under which natural resources management falls: the Ministry of Environment and the Ministry of Agriculture, Fisheries and Forestry. Furthermore, a small but important number of students will continue with research activities on the university, with the vital task of training new Cambodian nationals in conservation biology and natural resources management. Finally, the project will develop important educational, research and dissemination tools in a zoological reference collection, basic library facilities and through the publication of the Cambodian Journal of Natural History.

**16. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.**

By the end of the three years, the university will be in a position to continue to run the conservation biology course, with the developed and tested teaching modules, necessary facilities and equipment, and trained lecturers in place. The links built between the university and other conservation organisations will be sustained, ensuring future involvement of students in relevant applied research.

FFI has a well established Cambodia Programme and is familiar with local customs and traditions.

Furthermore, FFI Cambodia Programme has long and strong working relationships with local government partners as well as RUPP, the latter which has been consulted extensively during the design of the project. Therefore, we are confident that, should any problems arise, we will, together with our local partner institutions, be able to identify the root of the problem and address it appropriately. FFI will suggest a mini-steering committee consisting of representatives from key collaborating organisations (RUPP, MAFF, MOE) who will meet biannually to review project progress and/or identify and address potential problems.

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

All the project's junior research officers will carry the title "Darwin Scholars". Darwin logo will be printed on the Cambodian Journal of Natural History and the teaching materials produced under this project.

**18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. 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?**

The entire project focuses on training and development.

The Darwin project will (a) Work with faculty members to devise and implement new teaching modules and diploma at Cambodia's premier universities; (b) 'Train the trainers' by providing advanced training and experience for 20 researchers-cum-lecturers selected from the best students and government staff; (c) Use FFI's extensive field programme in Cambodia to provide opportunities for students to work and learn alongside experienced Cambodians and British experts.

The trainees will mainly consist of university students that have passed or attended basic environmental courses, for example, the USEPAM (DANIDA supported) programme for environmental science. Furthermore, a significant number of officers from the two Government authorities charged with the responsibility of natural resources management; the Ministry of Environment and the Ministry of Agriculture, Fisheries and Forestry, will be invited to participate in the courses. These, however, will be released subject to preceding ministerial agreements to avoid depriving them of normal departmental duties.

Three full semester courses will be conducted over the project duration of 3 years. The course will be developed by experts and academics from Fauna and Flora International and collaborating international research institutions and offered to Cambodian and British nationals (exchange students) only. It is anticipated that a minimum of 20 students will participate per semester. The first year of teaching will be undertaken by international lecturers alone; however, the second year lecturing will be the responsibility of both international staff as well as the 15-20 "Darwin Scholars" who will be identified after the first examination. It is anticipated that the third round of lectures (in project year 3) will be undertaken solely by the "Darwin Scholars", thereby applying a gradual transition of duties from international staff to national staff.

The effectiveness will be evident in the form of course popularity as well as number of students passing the annual exam.

**LOGICAL FRAMEWORK**

**19. 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
<b>Goal:</b> <b>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</b> <ul style="list-style-type: none"> <li>• the conservation of biological diversity,</li> <li>• the sustainable use of its components, and</li> <li>• the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</li> </ul>			
<b>Purposes</b> To build capacity in conservation and applied research at Cambodia's premier universities, chiefly by	Number of active research projects and conservation biology courses at the Royal Universities, number of	Research publications, course modules, Diploma in Conservation	Facilities, trainers and students available

<p>establishing new teaching modules and diploma in conservation biology, supported with practical field experience</p>	<p>new students</p>		
<p><b>Outputs</b></p> <p>1) 60 students trained for 15 weeks on new module, of which 20 will be selected as junior research officers ('Darwin Scholars').</p> <p>2) The Royal Universities obtain essential field equipment, research facilities and hardware to conduct conservation research projects.</p> <p>3) Better conservation effort on the ground due to increased inter-institutional collaboration in fieldwork and 3-5 joint education and research workshops</p> <p>4) Cambodia's first zoological reference collection and basic library facilities initiated, with 3 curators and 3 librarians trained for 12 weeks, database system &amp; field guides developed.</p> <p>5) The first issue of the Cambodian Journal of Natural History published and distributed (final year of project)</p>	<p>Courses and exams conducted every second semester, the number of active junior research officers increased at the Royal Universities.</p> <p>Conservation research projects at the Royal Universities have adequate equipment and other resources</p> <p>Active collaboration between the universities, local NGOs and Ministries on joint research and conservation, workshops conducted.</p> <p>Active collection and library set up, field guides for herps and small mammals published in Khmer language, specimens remain in Cambodia for general use.</p> <p>Editors and review panel established, journal available to NGO, GO and academic institutions.</p>	<p>Course modules available, Darwin Scholars in place and active, researchers working on conservation projects.</p> <p>Equipment purchased and in use, facilities available</p> <p>FFI staff as supervisors, research officers attached to MAFF/MOE/NGO research and conservation projects, abstracts, proceedings and reports printed</p> <p>Reference collection and library setup up and used by students and researchers, specimens are identified in country not sent overseas</p> <p>Printed copies of Cambodian Journal of Natural History available</p>	<p>Trainers available, sufficient number of students qualifying to become Darwin Scholars</p> <p>Sufficient funding</p> <p>Cooperation from NGOs and ministries.</p> <p>Available staff for training, appropriate facilities available</p> <p>Sufficient contribution of papers, review panel members active</p>

Activities	Activity Milestones
<p>1) Develop certificate level module curriculum and exams, and conduct lectures in applied research, conservation biology and natural research management</p> <p>2) Develop applied research projects that are integrated with existing FFI and government conservation projects, other international NGOs, and international development projects (thereby sharing costs and expertise).</p> <p>3) Prepare reference collection facilities, including designing and initiating a database system, procure necessary storage and preservation equipment and materials, train curators and collect and identify specimens collected during fieldwork by the students and Darwin Scholars.</p> <p>4) Initiate a small library of books, papers and reports relevant to the study and conservation of Cambodian biodiversity (linked to the database system) and train librarians</p> <p>5) Found the Cambodian Journal of Natural History including creating an editorial committee, design lay-out and volume format, set up reviewer network and publish first round of papers</p> <p>6) Promote Cambodia and the Royal Universities for national researchers and students, and encourage other British institutions to develop student exchange programme.</p>	<p><u>Year 1</u>  <b>Q1&amp;2:</b> Develop teaching module; Conduct lectures (largely led by British trainers); Initiate specimen collection and library facilities; Train curators and librarians</p> <p><b>Q3&amp;4:</b> Exams. and identification of junior research officers ('Darwin Scholars'); Develop research programme with GO and Intl. NGOs; Begin research projects and specimen collection</p> <p><u>Year 2</u>  <b>Q1&amp;2:</b> Conduct 2<sup>nd</sup> round of lectures (input from Darwin Scholars); Continue research projects and supervision of research officers</p> <p><b>Q3&amp;4:</b> Exams; Continue research projects; Facilitate international university collaboration; Initiate Cambodian Journal of Natural History (CJNH)</p> <p><u>Year 3</u>  <b>Q1&amp;2:</b> Conduct 3<sup>rd</sup> round of lectures (chiefly by Darwin Scholars); Continue research projects; Promote student exchange programmes; Publish 1<sup>st</sup> issue of CJNH</p> <p><b>Q3&amp;4:</b> Exams; Continue research activities; (Initiate development of a new Masters curriculum for students trained in previous years).</p>

**20. Provide a project implementation timetable that shows the key milestones in project activities.**

<b>Project implementation timetable</b>		
<b>Date</b>	<b>Financial year</b>	<b>Key milestones</b>
	Apr-Mar 2005/6	<b>Q3&amp;4:</b> Develop teaching module; Conduct lectures (largely led by British trainers); Initiate specimen collection and library facilities; Train curators and librarians.
	Apr-Mar 2006/7	<p><b>Q1&amp;2:</b> Exams and identification of junior research officers ('Darwin Scholars'); Develop research programme with GO and Intl. NGOs; Begin research projects and specimen collection.</p> <p><b>Q3&amp;4:</b> Conduct 2nd round of lectures (50% input from Darwin Scholars); Continue research projects and supervision of research officers.</p>
	Apr-Mar 2007/8	<p><b>Q1&amp;2:</b> Exams; Continue research projects; Facilitate international university collaboration; Initiate Cambodian Journal of Natural History (CJNH).</p> <p><b>Q3&amp;4:</b> Conduct 3rd round of lectures (chiefly by Darwin Scholars); Continue research projects; Promote student exchange programmes; Publish 1st issue of CJNH.</p>

	Apr-Mar 2008/9	<b>Q1&amp;2:</b> Exams; Continue research activities; (Initiate development of a new Masters curriculum for students trained in previous years).
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**21. Set out the project's measurable outputs using the separate list of output measures.**

<b>PROJECT OUTPUTS</b>		
<b>Year/Month</b>	<b>Standard output number (see standard output list)</b>	<b>Description (include numbers of people involved, publications produced, days/weeks etc.)</b>
Year 1: Q1 – Q3 Year 2: Q1 Year 3: Q1	(2) 3	Production of 60 Darwin scholars accredited with diplomas. All scholars will be Cambodian Nationals at graduate level, and if Royal University of Phnom Penh can formalise it during project period, they will obtain formal MSc degrees.
Year 1: Q2-Q3	6A	Two librarians and two curators will be trained to manage and maintain the library and the development of zoological reference collection
Year 1: Q1-Q3	7	Development of 5 different course material, primarily in research technique and analysis, GIS, national environmental legislation, CITES/IUCN lists and project management (e.g. LFA). The material will be amended and improved during year 2 and 3.
Year 1: Q 1-4 Year 2: Q1-4 Year 3: Q1-4	8 8 8	5 UK-staff 4 UK-staff 3 UK-staff
Year 2-3: Q1-4	11A, 11B	10-15 papers produced by local Darwin scholars are expected to be either published or submitted to journals. The papers will all have direct relevance to contemporary Cambodian conservation biology.
Year 1: Q1-4	12A	A database for the zoological reference collection will be developed and handed over to the RUPP.
Year 1-3: Q1-4	13A	Cambodia's first zoological reference collection will be developed and handed over to RUPP.
Year 1-3	13B	Botanical reference collection will be enhanced through collection of additional specimens collected during research projects.
Year 1-3	14A 14B	There will be 3-4 joint workshops with MOE and MAFF on contemporary Cambodian conservation biology, research and collaboration. Darwin scholars will participate in 3-4 relevant national workshops.
Year 1-3	15A, 15B	It is anticipated that the project will have 3-4 national press releases per year.
Year 2-3	16A, 16B	The project intends to develop the first "Cambodian



Year 3	20	Journal of Natural History as a biannual publication. It is expected the publication will be printed in 500 copies as a start.
Year 1-3	22	75.000 £, in computers, zoological reference collection, field equipment and course curriculum with teaching material.
Year 1-3	23	10-12 long term field plots and survey sites are expected to be setup during the project and maintained by Darwin scholars at RUPP after project completion.
		Total £ 221.084 Main contributor will be RUPP with the following: Collaborating staff: £49.499 Office facilities, communication, stationary, reference collection room, printing : £ 66.973  Fauna and Flora International: International staff support, such as: GIS expert, curator trainer, technical assistants and field equipment: £ 108.612  USFWS contribution to national research staff, field projects and equipment: £ 50.000  Disney contribution to national research staff, field projects and equipment: £15.000  Belgium Development corporation support of education of local scholars: £ 20.000

## MONITORING AND EVALUATION

**22. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.**

FFI will be responsible for overall project implementation and follow standard international project management practises.

The National project partner will play an equal role in assessing project progress and success. This will, above all, be measured in completed course curriculum, active zoological reference collection, useful library, active “Darwin Scholars”, number of new students “produced” every year and available research facilities and equipment.