# DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES : APPLICATION FOR GRANT FOR ROUND 9 COMPETITION

Please read the accompanying Guidance Note before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form. Applicants are asked not to use the form supplied to cross refer to information in separate documents except where this is invited on the form. The space provided indicates the level of detail required but you may provide additional information on a separate sheet if necessary. Copies of this form are available on disk or by e-mail on request. You are asked also to complete the summary sheet attached at the end of this form. Although you may reproduce this sheet in a reasonable font, you should not expand it beyond an A4 sheet (leaving the allocated space for DETR comments to be made) as additional information will not be taken into account.

1. Name and address of organisation

FAUNA & FLORA INTERNATIONAL, Great Eastern House, Tenison Road, Cambridge, CB1 2TT, UK Tel: +44 (0)1223 571000 Email: info@fauna-flora.org

2. Principals in project

Details	Project leader	Other UK personnel (if working more than	Main project partner in
		50% on project)	host country
Surname	Oldfield		Professor Hiep
Forename(s)	Sara		
Post held	Co-ordinator		Botanist
Institution	FFI		University of Hanoi
Department	Global Trees Conservation Program		Department of Botany
Telephone			
Fax			
Email			

Please provide a one page CV for each of these named individuals.

3. Project title (not exceeding 10 words)

## COMMUNITY-BASED CONSERVATION OF HOANG LIEN MOUNTAIN ECOSYSTEM, VIETNAM

4. Abstract of study (in no more than 750 characters)

A major global centre of plant diversity and one of the last refuges of the crested black gibbon, the Hoang Lien mountain forests in northern Vietnam, are under threat from unsustainable exploitation and illegal trade of endangered species, as well as timber extraction and agricultural encroachment. The project aims in the first year to identify priority sites for conservation and threats to endangered plants, primates and their habitats. This will be followed by community-based conservation interventions such as community participation in the management of an expanded protected system, local conservation stewardship agreements, development of sustainable management of non-timber forest products and propagation of endangered plants (e.g. Orchids). These initiatives will be introduced in buffer zone villages to generate alternative source of income and to REDUCE pressure on forests and endangered species.

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1 April 2001 – 31 March 2003 Two years

6. Describe briefly the aims, activities and achievements of your organisation. (<u>Please note that this should describe your unit, institute or department within a university.)</u>

Aims

Fauna & Flora International acts to conserve threatened species and ecosystems world-wide, choosing solutions that are sustainable and based on sound science, and that take account of human needs.

#### Activities

Fauna & Flora International (FFI), founded in 1903, is the world's longest-established international conservation body and one of only a few whose remit is to protect the entire spectrum of endangered species of animals and plants world-wide. FFI develops, implements and manages biodiversity conservation projects world-wide, working in partnership with in-country organisations. FFI is currently involved in over 60 needs-driven projects across 45 countries; getting involved in different stages and aspects of projects as appropriate. FFI also develops and fund-raises for its own initiatives, which are all identified through local contacts. All FFI projects include a strong element of capacity building.

FFI's role includes project management, technical assistance, capacity building, specific training programmes, public awareness, environmental education, biodiversity research, protected areas management, biodiversity planning and project preparation. FFI also supports small-scale conservation projects through its grants fund – the 100% Fund. In addition, FFI publishes the internationally respected journal Oryx, and maintains strong links with a range of UK-based academic institutions.

FFI is run by a committee of Trustees elected at the Annual General Meeting. They form a Governing Council composed of a Conservation Committee of eminent scientists (which oversees conservation activities), and an Executive Committee which oversees the management, finance and general running of the Society. FFI has a professional membership of approximately 3500 members from over 100 countries. The organisation operates through a group of UK and overseas-based staff, who have a vast experience of a wide range of conservation approaches and techniques.

### Achievements

- Conservation status review of endangered orchids in northern Vietnam (2000).
- Conservation status review of primates in northern Vietnam (1999-2000).
- Project development phase conducted (PDFA) for GEF-World Bank medium-seized grant for the conservation of Cuc Phuong-Pu Luong limestone landscape (2000).
- Project development phase (PDFA) conducted for GEF UNDP medium-seized grant for the development of Phnom Aural and Phnom Samkos Wildlife Sanctuaries in the Cardamom Mountains, Cambodia (2000).
- Invited by UNDP to work with the National Environmental Commission to prepare a GEF programme strategy once Liberia accedes to the Convention on Biological Diversity (1999).
- Delivered a training course (formal and field-based) on advanced survey and monitoring skills to staff of the Royal Society for the Conservation of Nature in Jordan (1999). This was followed up with direct input into the design of revised survey and monitoring methodologies for all nature reserves in Jordan.
- Provided technical assistance in preparation of the Biodiversity Strategies and Action Plans for the Republic of Armenia and the Kyrgyz Republics, in line with their CBD obligations (1998-9).
- Survey and interpretation training provided to national park staff in the British Virgin Islands as part of a Darwin initiative project run by the BVI National Trust (1998-2001).
- Biodiversity conservation in Tabunan forest, Philippines, supported by Darwin Initiative and including a strong element of survey training (1998 2001).
- Protected areas management in the Andaman Islands, India, supported by the Darwin Initiative (1997 2001), including establishing a monitoring programme and a strong element of survey training and research.
- International Gorilla Conservation Programme addressing species recovery, habitat conservation, ecotourism and community benefit-sharing in Rwanda, Democratic Republic of Congo and Uganda (1979 -ongoing).
- 7. Has your organisation received funding under the Initiative before? If so, please give details.

Reviewing Management of Sapo National Park and Creation of Liberian Protected Area System (2000 – 2002) Protected Areas Management Planning in the Andaman Islands, India (1997 - 2000) – 162/06/173 Tabunan Forest Biodiversity Conservation Project ,Cebu, Philippines (1998 - 2001) - 162/07/149

8. Which overseas institutions, if any, will be involved in the project? Please explain the responsibilities of these institutions.

#### Forest Protection Department (Province of Lao Cai), Ministry of Agriculture and Rural Development

Main counterpart for the project, responsible for project endorsement and supervision. FPD is the agency responsible for the management of watershed protection forests and protected areas.

## Forest Inventory and Planning Institute (FIPI)

FIPI is the responsible agency for forest inventory, feasibility studies and investment plans for the gazettement of protected areas. FIPI's role in this project will be to develop in co-operation with FFI and FPD, an expanded protected area system to cover most of the Hoang Lien mountain range.

## Hanoi National University, Departments of Botany & Zoology

Both departments will be partners in training and capacity building for junior scientists in conservation biology.

#### PROJECT DETAILS

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

## **Community-based conservation of the Hoang Lien Mountains Ecosystem**

10. Is this a new project or the continuation of an existing one?

New project. Identified as a conservation priority following a conservation status review of plants and primates in northern Vietnam conducted by FFI.

11. What is the evidence for a demand or need for the work? How is the project related to conservation priorities in the host country(ies)? How would the project assist the host country with its obligations under the Biodiversity Convention?

#### How was the work identified?

FFI and collaborating Vietnamese scientific institutions (FIPI, IEBR, University of Hanoi), as well as the Forest Protection Department (Ministry of Agriculture and Rural Development), have identified the project area as a priority site for the conservation of endemic plants and primates. The need for the conservation of rare and endangered plants was identified by concerned Vietnamese botanists from the University of Hanoi. This is due to the increasing trade in plants for medicinal properties and ornamental and forest conversion, leading to a rapid decline of populations and species extinction. They also expressed a need for capacity building and training in botanical inventory and systematic identification of priority sites for plant conservation. FFI has identified the northern Indochinese limestone forests and tropical montane forests (Hoang Lien Mountain Range), as the two the most threatened ecosystems in Vietnam and immediate priority areas for plant conservation in Vietnam and Indochina. FFI, FPD and the University of Hanoi agreed to jointly develop a project for the conservation of rare and endemic plants in northern Vietnam and the Royal Botanic Gardens Kew have agreed to cooperate. Moreover, FFI and FPD identified the area as a priority site for the critically endangered black crested gibbon (Vietnam Primate Conservation Status Review 2000). As all partners recognised the limitation of the protected area approach to conserve plants and their habitats in Vietnam, it was logical to develop an approach that supports local communities in the protection and sustainable use of rare and endangered species. The selection for the project area is based on the National Biodiversity Action Plan (BAP), listing the site as one of the highest priority for conservation in Vietnam (GOV 1996). The area is considered as a Centre of Global Plant Diversity {CPD EA67] (WWF & IUCN, 1995). A three-year-review workshop conducted a gap analysis of the implementation of the BAP, highlighting the fact that no conservation interventions have been undertaken to protect the Hoang Lien Mountain Range (IUCN, 1998). Only 20% of the forested mountain range is currently under protection, excluding the important limestone forests in Van Ban district. Due to faulty boundary alignment in the past, only half of the existing Hoang Lien Nature Reserve is forested and the current management is lacking the capacity and support of local people to reduce the threats.

## How is the project related to conservation priorities in the host country?

Highest Priority in National Biodiversity Action Plan (Biodiversity Value 'A'). Priority on National List for GEF Projects in Vietnam. Community-based approaches to forest protection have highest priority in Vietnam's current forestry policy (5 million Ha program: 1998-2010) and legislation. The project has the potential to leverage further funding for long-term conservation through a GEF medium-seized project (max. USD 750.000).

How will the project assist the host country meet its obligations under the Biodiversity Convention?

- Identifying priority sites for the conservation or rare & endemic plants and primates (Section 3.1. 'Setting priorities for protected areas', *Biodiversity Action Plan for Vietnam*);
- Development of village conservation stewardship agreements (Section 4.10. 'Socio-economic aspects of biodiversity conservation', *Biodiversity Action Plan for Vietnam*);
- Development of systems of sustainable management of non-timber forest products or ex-situ propagation of endangered plants (Section 4.8. 'Need for ex-situ conservation', *Biodiversity Action Plan for Vietnam*);
- Increasing awareness for the protection of endangered plants and primates (Section 4.9. 'Education & Awareness Programs', *Biodiversity Action Plan for Vietnam*);
- Improving protected area management with participation of local communities (Section 3.3. 'Strengthening the management of Nature reserves and National Parks', *Biodiversity Action Plan for Vietnam*);

- Expanding the current protected area system and reviewing current boundary alignments (Section 3.2 'Revision of the protected area system', *Biodiversity Action Plan for Vietnam*;
- Participatory law enforcement (Section 2.2. 'Strengthening law enforcement', Biodiversity Action Plan for Vietnam').

In what ways can this project be considered a Darwin project? How does the project relate to the Darwin principles? How would the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?

The proposal responds to the Darwin principles by focussing on the immediate needs to conserve an area that is rated highest priority for biodiversity conservation in Vietnam in the National Biodiversity Action Plan. The project is committed to training and capacity building in conservation biology and participatory protected area management, through the collaboration of British institutions (FFI & Royal Botanic Gardens, Kew) and scientists of proven excellence within Vietnamese institutions. The project is contributing to poverty alleviation by focussing on a community-based approach to conservation. As the Hoang Lien Mountains are listed in the National priority list for GEF funded projects, the Darwin grant will enable the leverage of additional funding for long-term protection through a GEF medium-sized project (up to USD 750,000), after the two year grant period.

The Hoang Lien Mountain Range is a global centre of plant diversity where ecological gradients accelerate evolution. The area requires urgent conservation interventions. Illegal trade in rare and endemic plants, as well as hunting and agricultural encroachment has already led to population declines and local extinctions. The two most important ecosystems in the mountain range are montane forests and limestone forests (Van Ban district).

The Hoang Lien Mountain Range with an altitudinal range from 300 to 3,143 meters lies at the junction of two biogeographic realms (Palearctic and Indomalayan), and three biomes (tropical dry forests/woodlands, tropical humid forests, and subtropical/temperate rainforest/woodlands). The montane flora of the Hoang Lien Mountains therefore contains a unique assemblage of species representing these different biogeographic realms and biomes. Nguyen Nghia Thin (1998), estimates that this mountain range is home to 25% of Vietnam's endemic plant species. In addition to endemic species, many threatened and relict species survive in the Hoang Lien Mountains. While mammal diversity and distribution is relatively low as a result of intensive hunting pressure the Hoang Lien Mountains are rich in other animal groups, 347 bird species have been recorded, including 49 that are restricted in Vietnam to northwestern Tonkin. Half of Vietnam's known amphibian species, including two new species that were only described in 1999, are known from the area. The large forest in Van Ban district harbours what might be the only reasonably intact population of black crested gibbon (*Hylobates concolor*) in Vietnam.

Limestone vegetation, the second most important ecosystem, is unique in many respects. Its appearance and species composition are distinctive compared with other vegetation types. This area in Van Ban district has not yet been scientifically surveyed. The dissection of the karst surface and a large altitudinal range in combination with the often intricate pattern of acid and alkaline soils, as well as an extreme variation in micro-climatic conditions lead to adaptation by accelerated evolution. This results in a high degree of endemism, especially in the highly fragmented environment of limestone ecosystems in northern Vietnam.

The Hoang Lien Mountain range is surrounded by some of the poorest ethnic minorities (Hmong, Dao, Tay, Giay) of northern Vietnam and are highly dependent on forest resources. Without community-based conservation it is unlikely that the rare and endemic flora and fauna can be successfully protected, which is why this project has chosen a community-based approach to conservation.

13. Set out the proposed timetable for the work, including the programmes measurable outputs using the attached list of output measures

Section 2.6 Outputs & Activities	Six month periods		OUTPUTS			
	1	2	3	4	Code	Quantity
1. Identification of priority sites for plant and primate conservation		1	u .	II.	1	•
1.1. Systematic biological survey (including training)	X	X			8	30
1.2. Threat Analysis	X	X			9 8	5 30
1.3. Identification of priority sites		X	X			
1.4. Carry out studies of commodity chains of plant resources. Strengthen regulatory environment where necessary		X				
2. Village conservation stewardship agreements						
2.1. Develop the scope of forest protection contracts to include plant and primate protection and expand this system to critical plant areas within and outside the protected area			X		8 9	20 2
2.2. Develop village-based forest protection regulations and penalties to ensure in-situ conservation			X	X		
2.3. Develop stewardship agreements with individual households who are given development assistance to propagate endangered plant species so as to reduce pressure on wild plants			X	X		
3. Increased awareness for plant and primate conservation		I	1	1	1	
3.1. Conservation awareness training	X				8	20
3.2. Develop conservation awareness materials for endangered plants and	X	X			6A	4
gibbons			<u> </u>		6B	50
3.3. Develop village-based conservation awareness programme with women's union, youth groups, and schools		X	X	X	7	3
3.4. Develop public media campaign for the conservation of endangered		X	X	X	15A 15B	8 8
species in the Hoang Lien Mts.					15D 15C	$\begin{bmatrix} 6 \\ 2 \end{bmatrix}$
					16A	1
					16B	500
					18A	2
					18C	2
					19A	4
					19C	4
4. Propagation of endangered plants and /or development of more sustainable systems of NTFP extraction		1	1	1	<u> </u>	
4.1. Assess current rate of NTFP extraction and trade	X	X			8	10
4.2. Provide extension incentives for sustainable NTFP extraction and propagation of endangered plant species in home gardens			X	X	23	£4,000
4.3. Develop model gardens			X	X		
5. Improved community participation in protected area management & law enforcement						
5.1. Conduct feasibility study for the gazettement of new/ or expanded reserve in Van Ban district			X		8 9	10 2
5.2. Conduct a stakeholder consultation workshop for reserve gazettement			X		14A	1
5.3. Develop investment plan and submit to the government for approval			X			
6. Gazettement of new protected area in Van Ban district (or expansion of existing Hoang Lien reserve)						
6.1. Facilitate participatory boundary delineation				X	8	10
6.2. Training workshop to develop protected area management plan with full participation of local communities				X	9 14A	2
6.3. Develop a mechanism for regular community consultation	1			X	23	£2000

14. Do you know of any other individual/organisation carrying out similar work? Give the details of the work, explaining the similarities and differences.

Currently no other conservation project in Vietnam takes a community-based conservation approach focusing on plants and primates. Buffer zone development projects have existed for two years in several other locations such as Cat Tien and Ba Be National Parks. This project will learn from the experiences of other ICDP projects. However, none of these projects involves local people directly in protected area management. IUCN is supporting a research project on sustainable use of non-timber forest products. The Darwin project will draw on experiences of this project.

15. Will the project include training and development? Please indicate how many trainees will be involved, from which countries and what will be the criteria for selection. How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length of any training course.

Training and capacity building will focus on biological fieldwork and protected area management. Experienced scientists from the UK will develop a training programme for junior scientists and lecturers in co-operation with the Department of Botany, University of Hanoi. FFI zoologists will conduct training courses and on-the-job training in collaboration with the Zoology Department, University of Hanoi. Training will include 4 formal training courses (10 days/ 10-15 participants) as well as intensive on-the-job training (4 trainees). An additional training course will be held on participatory protected area management planning in co-operation with the forest protection department for reserve management and rangers (10 days/ 20 participants). An intensive two-month training programme will be conducted for the conservation awareness programme.

16. How will trainee outcomes/destinations be monitored after the end of the training?

FFI has established a long-term relationship with FPD and the University of Hanoi, and will continue to assist these organisations after the project ends. FFI will thus be able to monitor and continue supporting protected area management planning. FFI will request bi-annual progress reports from FPD. Data compilation for the research component is scheduled every 3-6 months, depending on the season, allowing regular oversight of activities and a project officer will make field visits every few months. Conservation awareness training will include a formal test and certification at the National Conservation Awareness Training Centre at Cuc Phuong National Park and 6-monthly monitoring of the programme.

17. How is the work of the project expected to continue after the end of grant period? A clear exit strategy must be included.

The national GEF focal point has prioritised the Hoang Lien Mountains for GEF support and UNDP/GEF has expressed an interest in developing a GEF medium-seized project, that would begin after the two year Darwin grant. Considering the long time-scale for GEF project approvals in Vietnam, it is very important that immediate conservation initiatives start with Darwin support. The Darwin funded project will also facilitate the feasibility study and development of an investment plan for a new reserve in Van Ban district or expansion of the Hoang Lien Nature Reserve. Government endorsement of the investment plan will provide for the sustainable long-term state budget allocation.

## **MONITORING AND EVALUATION**

18. Describe how progress on the project would be monitored and evaluated in terms of achieving its aims and objectives, both during the lifetime of the project and at its conclusion. How would you ensure that it achieves value for money? What arrangements will be made for disseminating results? If applicable, how would you seek the views of clients/customers?

The project will result in many tangible outputs: workshops, training and awareness materials, plans, training sessions, gazettement feasibility study and investment plan, community meetings, gazettement of new protected area, models for sustainable use and /or propagation of endangered plants). Precise targets will be set out in the 12-month work programmes, which will be updated bi-annually. Bi-annual reports will be required to see if activities are on schedule and targets are met. Regular visits from FFI will confirm progress and allow us to make adjustments. A final report will assess the overall success and shortcomings of the project and its likely impacts over the long term. FFI management has instituted an internal monitoring system of quarterly reports, too.

The results will be disseminated through press releases in Vietnam to newspapers, radio interviews in Vietnam, press releases in the UK, and articles submitted to scientific journals such as Oryx. The proposals presented to donors at the project's conclusion will refer to Darwin and will be accompanied by the summary of the final report, thus publicising Darwin to the most significant environmental conservation donors in the world.

Project summary	Measurable indicators	Means of verification	Important assumptions
Goal Long term conservation of priority areas in Vietnam	Formal recognition of new protected areas and protection mechanisms	Areas designated and mechanisms endorsed	Continued commitment by Vietnamese authorities
Purpose Community-based conservation of Hoang Lien Mts.	Reduced rate of     unsustainable NTFP     extraction, forest     conversion and hunting	<ul><li>Fixed-point</li><li>photography</li><li>Trade studies</li></ul>	Viable populations of endangered plants and primates still exist
Outputs 1. Priority sites for plant and primate conservation identified. Threat analyses for endangered species & habitats (e.g. trade study).	Gap and threat analysis (key habitat localities)	<ul> <li>Botanical survey reports</li> <li>Trade survey report</li> <li>GIS maps</li> </ul>	Sufficient taxonomic expertise and data available
2. Village conservation stewardship agreements in place (e.g. improvement of forest protection contracts and local forest protection regulations)	Level of community- based forest protection.	Review of forest contractee compliance reports	Offenders will be apprehended and prosecuted
3. Increased awareness for plant and primate conservation	Attitudes and actions of selected target groups towards plant conservation	Knowledge and attitude surveys	<ul> <li>Knowledge changes attitudes and people have the capacity for the greater good </li> <li>Recipients receptive to arguments and will want to participate.</li> </ul>
4. Propagation of endangered plants and /or development of more sustainable systems of NTFP extraction	Endangered plant species are sustainably extracted or propagated	Models of NTFP     management and/or plant     propagation	Expertise for orchid / gymnosperm cultivation available
5. Improved community participation in protected area management and law enforcement	Level of community conservation activities	Community rights and responsibilities with protected areas are defined in management plan	Political will for increased community role in protected area system
6. Gazettement of new protected area in Van Ban district (or expansion of existing Hoang Lien reserve)	Feasibility study and investment plan	Gazettement decree	Political will to expand the current protected area system
Activities			
1.1 Systematic biological surveys	£5,000	Survey reports published	Survey permits issued Weather conditions permit site access
<ul><li>1.2 Threat analysis</li><li>1.3 Identification of priority sites</li></ul>	£2,000 £2,000	Threat analysis published Priority site reports	
1.4. Carry out studies of commodity chains of plant resources.	£4,000	Study reports	
1.5 Strengthen regulatory		Regulations endorsed	

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environment where necessary.	£1,700		Vietnamese FPD authorities
2.1. Develop the scope of forest protection contracts to include plant and primate protection and expand this system to critical plant areas within and outside the protected area	£1,000	New Forest Protection Contracts issued	collaborate in development of new contracts and new regulations
2.2. Develop village-based forest protection regulations and penalties	£5,000	Regulations endorsed	
2.3. Develop stewardship agreements with individual households that obtain development assistance for propagation of endangered plant species that ensure insitu conservation.	£7,000	Agreements signed	No anasial factors apply EEL
3.1. Conservation awareness training programme	£6,500	Awareness monitoring reports	No special factors apply. FFI is a leader in conservation awareness work in Vietnam
3.2. Develop conservation awareness materials for endangered plants and gibbons.	£5,500	Materials published	
3.3. Develop village-based conservation awareness programme with women's union, youth groups, and schools	£10,500	Records of awareness events	
3.4. Develop public media campaign for conservation of endangered species in the Hoang Lien Mts.	£1,600	Press cuttings, radio and TV broadcasts	
4.1. Assess current rate of NTFP extraction and trade	£3,500	Assessment report	Communities participate in assessments
4.2. Provide extension for sustainable NTFP extraction and propagation of endangered plant species in home gardens	£6,000	Extension visit records	
5.1. Conduct feasibility study for gazettement of new/ or expanded reserve in Van Ban district	£3,000	Study report	FPD collaboration
5.2. Conduct stakeholder consultation workshop for reserve gazettement	£3,000	Workshop outputs	
5.3. Develop investment plan and submit to government for approval	£1,700	Plan document	
			No special factors. FFI has

6.1. Develop protected area management plan with full participation of local communities	£2,750	Plan document	already developed on participatory management plan in Vietnam
6.2. Facilitate participatory boundary delineation	£1,000	Boundary delineation map	
6.3. Develop mechanism for regular community consultation		Consultation events	