



# ***BAI TU LONG BAY BIODIVERSITY AWARENESS PROJECT***

## *Darwin Initiative for the Survival of Species Annual Report*

***APRIL 2003***

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Contractor	The Society for Environmental Exploration
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## **1.0 Project Background**

The project is based in Bai Tu Long Bay National Park, Van Don District, Quang Ninh Province, Socialist Republic of Vietnam. Bai Tu Long Bay National Park was established in January 2001 in order to expand a protected area that was an island nature reserve of 2,000 ha into a National Park incorporating both marine and terrestrial environments and covering 13,000 ha. Initial short surveys of the area have highlighted the biological and geological significance of Bai Tu Long Bay,

One of the most serious issues facing protected areas in Vietnam is the lack of capacity for effective and sustainable environmental management. Vietnam's National Biodiversity Action Plan identifies the following as conservation priorities:

- establishment and management of protected areas, in particular integrated management of marine and coastal areas;
- improving public awareness about biodiversity conservation;
- capacity building and training of management staff involved in biodiversity-related work;
- international co-operation, to provide practical technical training, exchange of information and financial assistance, to work together to protect and develop Vietnam's biodiversity.

The current conservation status of the park is worrying. Significant logging, hunting, fishing (dynamite and cyanide fishing) within the new national park boundaries continues barely opposed or regulated by existing management structures. The recently appointed park authority is comprised of administrators and field staff from Provincial and District Forest Protection Department. They currently lack the technical capacity to effectively tackle the threats to the terrestrial and marine habitats of the national park.

## **2.0 Project Objectives**

### ***2.1. Purpose***

To raise biodiversity awareness and to facilitate conservation measures in Bai Tu Long Bay National Park.

### ***2.2 Objectives***

- To develop a Biodiversity Interpretation Centre for Bai Tu Long Bay National Park
- To provide biodiversity awareness, identification and monitoring training to national park management staff, and Vietnamese post-graduate students in the form of four biodiversity training workshops, involving British taxonomic specialists.
- To produce four bi-lingual taxonomic field guides, specific to the national park. Workshop participants will be encouraged to participate in the collection and collation of data for these guides, as this will provide ongoing practical training.
- To produce biodiversity information boards, following each workshop, for permanent display in the interpretation centre. These boards will provide the backbone for biodiversity awareness activities organised by centre staff for the local community.

***Refer to Logframe in Appendix 1.***

### **2.3 Operational Plan**

*A copy of the agreed output schedule is included in Appendix 2.*

The purpose and objectives of the project remain the same and project activities are achieving these. Due to the limited capacity of the national park authority, delays occurred in the timing of the workshops. The planning and law enforcement workshops were held during 2002, practical biodiversity field techniques training has been conducted and during 2003 a consolidation biodiversity workshop, eco-tourism workshop and park patrolling workshop will be held. These activities will be conducted closer together, with regard to time scale and will in effect be more beneficial to the trainees.

## **3.0 Progress**

Despite delays and obstacles, the project has progressed very well over the past year. Both the training and awareness raising components have planned and implemented many successful activities, contributing in no small part to the growing reputation for Bai Tu Long National Park and its conservation value. Successful classroom training in law enforcement and field training in biodiversity surveying has been organised. Awareness activities have included the set-up of a school environmental education programme, along with quarterly newsletters, 2 poster/fieldguide series, and in addition a national park website, and loud speaker programme. Planning for the interpretation centre has progressed well with construction scheduled for completion in late May 2003.

### **3.1 Workshops and Training**

*Workshop Planning Meeting* – To effectively plan and implement the workshop training, a meeting was arranged to facilitate communication between the park authority and the various local stakeholders. The meeting provided an opportunity to discuss management priorities for the park and determine areas where further training was required. It also gave the newly appointed park staff an opportunity to meet Bai Tu Long's stakeholders and explain the park's objectives.

*Law Enforcement Workshop* – Based upon results from the workshop planning meeting, the first workshop was organised on implementing park law in Bai Tu Long. A series of lectures were given by a number of Vietnamese experts who consult for a wide variety of International organisations such as WWF and Birdlife International. They presented on the precise laws in Bai Tu Long and identified which were of particular enforcement attention. The Research Co-ordinator of the Frontier-Vietnam Forest Research Programme, assisted this process by presenting preliminary results from the terrestrial biodiversity surveys.

- The workshop yielded useful results for park staff who identified what areas were of particular conservation and therefore enforcement importance. They also noted the constraints they faced implementing an effective enforcement plan along with methods for improving patrolling activities. Further equipment such as an extra speed boat and more staff were seen as immediate needs for improved enforcement methods. The awareness component currently being implemented is also seen as crucial to the future success of enforcement efforts.
- The workshop was covered by a camera crew from Vietnam TV. They filmed for two days interviewing the park vice-director and the project manager. The footage was compiled into a 6 minute news segment for national television and then a further 15 minute segment as part of a half hour special on Bai Tu Long and Xuan Son National Parks. Both segments aired at least 5 times. An article also featured in *Vietnam News*, a national English language paper.

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*Surveying Training* - Biodiversity surveying and monitoring training has been implemented through the Frontier-Vietnam Forest Research Programme. Park staff participated during the 4 expeditions that ran during 2002 for 2 week periods, gaining skills in biodiversity surveying techniques with an eye towards monitoring. A Biodiversity Consolidation Training Workshop with a UK expertise is scheduled to be held during May 2003. This workshop will concentrate on training core park personnel, evaluating knowledge gained to date and planning preliminary long-term monitoring with regard to vegetation and avifauna.

*Cuc Phuong Study Tour* - Bai Tu Long park management board members went to Cuc Phuong National Park to learn from their authority's experience. The three day study tour provided them an opportunity to view a fully functioning awareness programme along with meetings with management from Cuc Phuong. This included a visit to the park's interpretation centre, their school environmental education programme and a guided tour of the Endangered Primate Rescue Centre.

### **3.2 Awareness raising**

*Environmental Education Programme* – The school programme has made excellent progress over the past few months. After appointing 4 trainers from buffer zone schools, project staff in joint co-operation with the District Department of Education and Training (DET) and the park authority developed a pilot 4 lesson course to run in Grade 6 classes in all the buffer zone commune schools. The pilot lessons will run in April 2003 and monitored by project staff. A further 4 lessons will be developed according to the results from the pilot. Further training will be held at the complete 8 lesson course will be implemented in all Grade 6 classes in the District. Each student will receive their own course book and teachers will receive comprehensive teachers notes that they themselves contributed to. The project hopes to produce enough materials for the programme to run through to 2007.

*Newsletter* – Newsletters have been running quarterly and have featured a range of park related topics with contributions from a wide variety of people. A thousand copies are distributed throughout the park's buffer zones, related government and non-government organisations and all other National Parks in Viet Nam. An electronic English copy is sent to relevant national and international organisations.

*Field guides/Posters* – Two editions of the field-guide and poster series have been produced, one on the vegetation of Bai Tu Long and another on birds. 1000 field-guides were produced for each series along with 500 posters, this was possible due to relatively cheap printing costs in Vietnam. Species notes and pictures have come from a wide variety of sources and verified by scientists from Hanoi National University and Birdlife International. They have been distributed widely locally and nationally.

*Website:* Refer to section 3.7

*Loud speaker system:* Refer to section 3.7

### **3.3 Interpretation Centre**

*Centre permissions and construction* – After receiving funding from the FCO to cover construction costs, project staff and the national park undertook the complicated task of obtaining building permission. This proved to be complicated and time consuming process. Documentation from numerous commune, district and provincial authorities were required to purchase land, approve building design and ensure it was compatible with government development plans for the commune. A company was contracted to conduct the permissions process and build the centre. Aside from a few complications, this has largely been achieved with centre construction scheduled to begin in mid-April. Construction will take two months.

*Display Design Planning* – A plan for the interior displays has been produced with project staff currently researching information and sourcing designers and artists. The centre aims to be operational by mid-July.

### **3.4 Training**

*Park Authority Training* – As part of the project workshop programme, a workshop was held on law enforcement in National Park in which all national park authority staff attended along with representatives from a number of commune organisations. Training materials were produced before hand and discussions (both group and plenary) were led by a professional facilitator. Frontier Forest Research Programme staff carried out field training for park staff with the assistance of a translator (see section 3.1). Further consolidation training will be held with regard to Biodiversity Survey and Monitoring, with an emphasis on future long-term monitoring in May 2003.

*Environmental education training* – 4 teachers from buffer zone schools were appointed by the project and DET to develop lesson plans for the course. They were chosen due to their professional background, familiarity with this type of course, and good teaching reputation. Their lesson plans were then discussed and edited in a series of meetings with project and park staff. After plans were redrafted, a training workshop was held where the teacher trainers gave the lessons to teachers involved in the course and lead discussions on their content. Final revisions were made before the printing of student books and teacher notes. The pilots lessons will be taught throughout April, May and June, and monitored by the Department for Education and Training and project staff.

### **Research**

Baseline biodiversity survey work began in January 2002 on a 12 month survey of the terrestrial environments of the national park. The survey work so far has been carried out on Ba Mun, Sau Nam, Ban Sen and Tra Ngo islands, which are composed of limestone bedrock and non-limestone bedrock.

#### *Vegetation survey*

- Simple quantitative and repeatable methods are used to investigate aspects of vegetation structural diversity, species diversity, stocking density and disturbance levels.
- Tree species composition are sampled using permanent vegetation plots of 50m by 50m (0.25 ha) to establish a basis for future monitoring of ecosystem exploitation, regeneration and development.
- Ground mapping and opportunistic observation are also undertaken to be used in conjunction with existing data both from Frontier surveys and those of other organisations.
- Levels of disturbance are assessed by systematically sampling the incidence of timber extraction and pole cutting using disturbance transects of 10 metres width.

To date 11 permanent forest vegetation plots have been established on Ba Mun, Sau Nam, Ban Sen and Tra Ngo islands. The habitats surveyed during the year have comprised mixed evergreen lowland subtropical rainforest, low canopy secondary semi-evergreen forest on limestone and non-limestone locations. Family and genus-level identifications have been provided in the field by Dr. Ha Van Tue (I.E.B.R.) and Dr. Tran Dinh Nghia (Hanoi National University). Disturbance levels have been found to be high in the majority of plots this is largely due to ease of access and a long period of intensive logging peaking between 1975 and 1995, which is a continuing problem today.

#### *Zoological Research*

Standardised, repeatable methods are used to record the faunal biodiversity value of the area. This zoological work is focused on a number of core groups of vertebrate and invertebrate fauna, namely: small mammals including bats; amphibians; birds; butterflies and hawk-moths. Opportunistic sampling of core faunal groups is carried out to supplement the systematic collection methods to survey more comprehensively faunal biodiversity for each area.

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To date mammal research has been conducted principally on bats, which are considered good indicators of habitat type and quality. Small mammal trapping also forms a component of the survey work and the presence of larger mammals has been ascertained through opportunistic observation.

*Socio-Economic Research*

Activities have been conducted with two principal aims: to identify the threats to the conservation of natural resources within the region studied and to develop an understanding of the context of these threats in relation to underlying development issues.

This research work is implemented through a series of informal interviews and discussions held with local inhabitants, and management and administrative authorities. There are no official residents living within the park's boundaries, there are, however, many communities of varying socio-economic condition living within the buffer zone with easy access to the park habitats by means of boat. The principal problem of hunting and logging is, it seems, a product of the poorer communes in the area which have a more traditional dependence upon forest for their lifestyle and livelihood.

***Refer to Appendix 3 for a fuller account: Biodiversity Interim report: Bai Tu Long Bay.***

***3.6 Difficulties encountered***

*Lack of Centre Building*

The problem of the lack of an education centre from which to work has caused a substantial shift in the project timeline. Funds were sought to build the centre, and the British Foreign and Commonwealth Office, through the British Embassy Hanoi generously provided the necessary funds to cover costs of building the centre. Permission for land purchase and construction proved then to be an immensely complicated and time-consuming process. Project staff spent significant time administering centre bureaucracy. These problems have gradually been overcome and the centre should be built by the end of May. The British Embassy were very helpful in assisting with the permissions process for purchasing land and building.

*Park Authority*

As the national park is very young, only established in January 2001 with their office opened in April 2001, they are still coming to terms with the new park establishment and thus capacity is low. The training programme has built capacity with the science and conservation departments however there is a limit of the project influence with regard to day to day running and general red tape.

Relations remain good and training activities are of a basic level due to the low capacity of the authority as a whole. Further capacity building on more levels over the next 3-5 years would aid the park to run efficiently and aid the long-term aim of sustainable natural resource management.

*Denied permission for volunteers of the Forest Research Programme*

Unfortunately immigration status was denied to the January 2003 volunteer group due to continue and expand the research activities of the Frontier-Vietnam Forest Research Programme. The National Centre Science and Technology (NCST) which governs the Institute of Ecology and Biological Resources (IEBR) and the Institute of Oceanography (IoO), Hanoi, the partners of the Society for Environmental Exploration would not process the visa applications. The Society held a series of meeting with project partners in Hanoi during February 2003 to resolve the matter. Additional meetings were also held with the Ministry of Agriculture and Rural Development (MARD), the Vietnam National University (VNU) and

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the Centre for Research and Environmental Sciences (CRES) with a view to forming new collaborative links and relationships.

Project staff have continued to work on the biodiversity awareness project throughout. The denied volunteer permission has meant that the forest research programme has been suspended for 6 months. This has had an effect in that the park authority staff have not been able to join the forest research programme. However this has been rectified by running a consolidation biodiversity training workshop for the core park science and conservation staff, which will be held in May 2003.

The Society's Vietnamese partnerships are still in place, that is current Memoranda of Understanding are still in existence and this project can continue as planned. The Society is currently forming new relationships with VNU and CRES. A proposed Memorandum of Understanding has been circulated and commented on with the aim of exchanging signatures in mid-May. We hope the forest research programme will resume its smooth running by July 2003 in Bai Tu Long Bay.

### ***3.7 Enhancements to the project***

The above section explains how problems have been encountered and addressed. In many ways, these problems have provided an opportunity for the staff to improve and enhance the project liaison. In addition to the enhancements outlined in the April 2002 report as follows:

- Administration Office in Cai Rong, Van Don: this is established close to the park headquarters for ease of liaison and staff involvement
- Consultative Planning Meetings: this was conducted successfully
- Park Authority Liaison Officer: specific staff member assigned to the project to increase good communication, ongoing.
- Posters and Field Guides: increased distribution and addition of posters to facilitate greater awareness
- Quarterly Newsletter: more often and greater distribution
- Monitoring and Evaluation techniques: ongoing
- Park Logo: on going
- English Tuition: on going;

The following are project enhancements for 2002/ 2003:

*Interpretation Centre building funds secured* - The cost of building a Biodiversity Interpretation Centre has been met by the FCO through the British Embassy Hanoi who are very supportive of Frontier-Vietnam projects. Refer to section 3.3 for further detail. The official opening of the centre by the British Ambassador of Vietnam, Mr. Warwick Morris is planned for early August.

*Village Loud speaker system* - The project community forum meeting (activity now discontinued) yielded valuable information from buffer zone commune leaders who said that almost half the villages surrounding the park do not have a loud speaker system. Without this hardware, commonly used around Viet Nam to inform the public, many people were being excluded from information not just about the park but also general public information on health, education, agriculture and other important topics. The project took this opportunity to address this concern and apply for funding to provide the communes with the necessary hardware.

Thus a new component has been added to equip all villages in the buffer zone communes with a loud speaker system. This will enable the park to keep residents regularly informed of their activities and any upcoming events.

The costs for implementing the speaker system and producing environmental messages have been covered by a Foreign and Commonwealth Office (FCO) grant. A small proposal was submitted the British Embassy in Hanoi and has been successful, we await the formal



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confirmation from the British Embassy in Hanoi. Once the system is installed running of new programmes and up keep will be low tech and of low cost, thus within the means of the national park authority.

*Website* – To raise awareness on a national and international level, project staff developed a national park website [www.baitulongnp.com](http://www.baitulongnp.com). The national park authority produced all content and they are currently being trained to update it regularly. This additional output ensures information reaches an international audience.

*Newsletter* - The Project Officer working with the Park Liaison Officer is now fully responsible for producing these outputs with the input from the national park authority. These are all produced in Vietnamese and later translated to English for further distribution. The park are aiming to include covering costs of newsletter production in their next budget allocation.

*Poster series:* The accompanying poster has complemented the field guide series. This format is considered better for awareness raising as it can be displayed and read by a wider audience.

***Refer to Appendix 4 for the timetable for 2003.***

## **4.0 Partnerships**

### ***4.1 Existing partnerships***

Aside from the capacity issue, the national park have been a generally supportive and enthusiastic partner for the project. They willingly participate in all project activities and certain individuals and departments have shown initiative in developing their own activities and asking the project for assistance.

The District Department of Education have proven to be an excellent and capable counterpart. They have exhibited a keen professionalism in their management and administration of the environmental education programme. The teachers have produced work of a very high quality and allowed the project to take a facilitator role at meetings. We have the utmost confidence the programme will be implemented successfully and be sustained well into the future.

An unexpected but welcome collaboration has been between the project and the District Department of Radio and Broadcasting. They have been very keen to implement the loud speaker programme in the park's buffer zone communes and provided all the necessary information required for the funding proposal. We are confident that with project and park assistance, the speakers will be fully operational later in the year.

With regard to partnerships on the national level please refer to section 3.6, forest research programme volunteers denied permission. Existing Memoranda are in place and project staff can continue with their roles. The Society has actively sought new collaborations and hopes to be working with the Vietnam National University as of June 2003.

### ***4.2 In country links with organisations***

#### ***IUCN/WWF***

The WWF and IUCN joint initiative to establish a National Conservation strategy for Marine Turtles has exciting prospects for Bai Tu Long. The park, which plays host to potentially three species of endangered turtle, seeks to establish a conservation and monitoring programme. Project staff have attended workshops organised by WWF and IUCN and have already volunteered to begin raising awareness about the issue in the area. The project also seeks to collaborate with WWF to organise turtle monitoring training for national park and ministry of fisheries staff. This is still in the planning stages but both parties are keen to collaborate on this issue.

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### *Environment for Nature Viet Nam (ENV)*

The project and ENV have established a very close relationship over the past year. We have organised two study tours to Cuc Phuong National Park where ENV have set up a conservation programme with the authorities. We contribute regularly to their quarterly environmental education publication and have helped foster a close collaborative relationship between the park authorities, including sending members to Cuc Phuong for training.

### *Animals Asia Foundation*

Animals Asia Foundation, a British Hong Kong based animal welfare charity, approached the project for assistance regarding their plans to setup a Asiatic black bear rescue centre in Bai Tu Long. Project staff introduced a planning party from Animals Asia to relevant provincial, district and park officials and helped them to organise a recce to find suitable centre locations. We have since been aiding communication between Animals Asia and the park and plan to raise awareness about Bear conservation through some of our various activities, most notably the centre.

Other liaison has been with Birdlife International on our Bird field guide, International Marine Life Alliance for the Enforcement workshop and the IUCN initiated 'National Workshop on Strengthening Marine Protected Areas' where project staff gave a presentation.

## **5.0 Impact and Sustainability**

Through our newsletters, website, national television, radio and newspaper coverage, poster/field guide and other publications, the personnel are confident both the project and the park have a high national profile. The fact that the staff and park officers are regularly invited to attend and in some cases present at national workshops is testimony. The project plans to continue to increase the profile of our work with the national park and aim to reach in even broader national, regional and even international audience before the end of the year.

The project also feels assured that significant progress has been made increasing interest and capacity for biodiversity. Locally our work with the DET will train 30 teachers, including 4 trainers to teach an environmental education course in all grade 6 classes in the District. The innovative approach used by the project could well become a model for other parks in Vietnam and has been well received by other environmental education practitioners.

By the end of this year, park authority staff will have a fully functioning awareness programme which they will be trained to run. Currently they actively participate in the school education programme, newsletter production, radio broadcasting and centre development planning. They will soon be attending a structured training course in publication production and centre management. Future workshops in eco-tourism and biodiversity monitoring techniques will also lay the groundwork for further activities in these areas.

All this training will constitute the project's exit strategy along with the infra-structural legacy of a speed boat, the education centre and computer hardware. The park will have both the technical capacity and equipment to continue all project activities in a sustainable manner.

## 6.0 Post-Project Follow up Activities

The biodiversity interpretation centre will be up and running this year but only fully functioning for 6 months before the current project finishes. The delay in the construction of the centre was due the promise of an existing building which did not come to fruition. However, since the success of acquiring additional funds for building the centre and the invaluable support of the British Embassy in Hanoi, it would be a shame not to be able to build the capacity of the national park staff to a higher level for them to sustainably manage the centre for years to come.

The DET have been the strongest partners with regard to the implementation of the environmental education programme. This relationship could be further developed with post project funding to further build capacity for the DET to secure funds themselves for further course book production for other age levels within the district.

The Society would like to continue and expand the biodiversity survey activities in Bai Tu Long bay, especially marine and coastal zone. Vietnam has poor capacity for managing protected areas that include marine and terrestrial environments. Marine environments within Vietnam are less well studied and unsustainable natural resource use and pollution are serious problems. Working in a new collaboration with the Vietnam National University the Society would like to conduct coastal and marine surveys and expand on initial pilot schemes conducted. This information would then be fed into the capacity building of the national park authority and look into the possibility of conducting Rapid Assessment of Marine Pollution (RAMP).

## 7.0 Outputs, Outcomes and Dissemination

### 7.1 Table 1. Project Outputs (According to Standard Output Measures) 2002/ 2003

Code No.	Quantity	Description
4C	10 man weeks	<b>Postgraduate students receive training</b>
4D		5 students participated for 2 weeks during July- December biodiversity surveys
6A	76 man weeks	<b>Other individual receiving training</b>
6B		National park authority and Forest Protection Department Staff received training in biodiversity field techniques (16 weeks), park staff participated in planning and law enforcement training ( 20 & 25 weeks) and teachers participated in environmental education training (15 weeks)
7	0	<b>Training materials</b> The centre displays are planned for the centre and will be incorporated once the centre building is complete
8	104 weeks	<b>Time spent in host country by UK staff</b> Project Manager and Biodiversity Trainer worked throughout the year in Vietnam.
10	2	<b>Field guidelines for National park</b> A vegetation guide and bird guide have been produced.
14A	2	<b>Workshops taken place</b> Planning workshop in April and Law enforcement workshop in July.
15A	2	<b>National Press release in National Papers</b>

		Announced planning and law enforcement workshops. An article was published in <i>Vietnam News</i> .
16A	2	<b>Newsletters</b> Two have been produced to date
16 C	2	<b>Newsletter posted on Frontier website</b> Two newsletters are posted on the main Frontier website, each in English and Vietnamese.
18A	2	<b>National TV programmes</b> Covered in national and local TV
19A/B/C/D	2	<b>Radio interviews/features</b> Planning and law enforcement workshops were covered by <i>Voice of Vietnam</i>
20	£15,160	Physical Assets for host country Purchase of a boat and accessories plus display equipment and materials for the interpretation centre
21	1	<b>Education facility set up in Vietnam</b> Environmental Education programme is up and running
23		<b>Value of other resources</b>
	£10,666	Matched funding for the project from the Society for Environmental Exploration.
	£60,000	<b>In kind support:</b> of Frontier-Vietnam Forest Research Programme from the Society for Environmental exploration.
	£3,172	Technical support from IEBR in the form of scientists participating on biodiversity research activities.

Outputs have been achieved as proposed but to a slightly later time schedule. UK experts will be joining the project for three training workshops and the final workshop during 2003. The themed displays for the centre are planned and will be produced during June and July.

## 7.2 Publications

Publications will be produced in terms of workshop proceedings: Law enforcement, Biodiversity consolidation training, Eco-tourism and Park patrolling.

Two peer review manuscripts are planned, workings titles: *National Park biodiversity awareness raising through environmental education initiatives: Bai Tu Long* and *A view to long term biodiversity monitoring through capacity building National Park staff*.

The project aided the production of a national park website, this can be viewed at: [www.baitulongnp.com/index.htm](http://www.baitulongnp.com/index.htm)

A CD accompanies this report and includes the Newsletter issues in English and Vietnamese and vegetation and bird field-guides and posters.

## 7.3 Dissemination Activities

**Newsletter** Two issues of the newsletter have been published to date and distributed within the district, 1000 copies in Vietnamese. The third issue is due for distribution during May 2003. The remaining issues of the newsletter will be produced predominantly by the park.

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Discussions are being held with the park authority with respect to the allocation of park funds to the continuation of future production.

**Website** This provides summary information about the National Park and those who visit the site will soon be able to download field guides, posters, newsletters and educational materials. The park authority are involved in the website content. The project is encouraging the park to secure funds from government budgeting or from external sponsors in order to support the website in the future.

**Field Guides and Posters** As stated above, aside from hard copies printed and distributed across Vietnam, these will also be available in PDF format from the website. This will greatly increase their circulation and ease of access to interested parties world-wide.

**Media Coverage** A short 15 minute programme has been shown on Vietnam TV. Radio and newspaper coverage has occurred via *Voice of Vietnam* and *Vietnam News*. Further similar coverage is planned for the remaining workshops of 2003.

**Loud speaker system** This will disseminate information to the buffer communes, re-iterating messages and information from newsletters and community forum meetings and hopefully reaching a wider audience within the village system.

## **8.0 Project Expenditure**

### **8.1 Table 3: Project expenditure during the reporting period**

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<i>Item</i>	<i>Budget</i>	<i>Expenditure</i>
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## **9.0 Monitoring, Evaluation and Lessons**

### **9.1 Park Training**

Workshop attendance is determined through a joint decision by the park and the project. Both participants and invited experts evaluate workshops through quantitative surveys. These are added to the workshop proceedings and lessons learned are incorporated into future workshop. All activities are organised through a close collaborative process between the project and the relevant member/s of the park authority.

Future awareness training, scheduled for June 2003, will be formally monitored through a competence based evaluation system. Trainees will be under the supervision of an appointed trainer, attend training sessions and receive written tests on information covered. Their application of their duties will also be observed and assessed. Reports will be submitted to the park's vice director for approval.

### **9.2 Environmental Education Training**

Training has been provided to 4 trainers from buffer zone commune schools who were orally assessed in their mock lessons by project staff and the DET vice director. A control class will be given a test of the current environmental education knowledge to ensure that the lesson plans are appropriately tailored to current aptitudes. Project and DET staff will observe

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piloted lessons and give a qualitative assessment of the class. After all pilot lessons have been given, students will be tested on their knowledge and results incorporated into an environmental education report. This will form the basis for the complete 8 lesson course that will be administered District wide later in the year.

In September 2003, a large-scale quantitative survey will be undertaken to determine the effectiveness of the awareness programme. Randomly selected households will be targeted in all the park's buffer zone villages with questions on what they know of the park and where they learnt about it. Socio-economic surveys undertaken by the Frontier-Vietnam Forest Research Programme already give some baseline information on local community knowledge and opinion of the park.

**9.3 Lessons learnt**

An important lesson learned by project staff is to set realistic goals for the park authority. This is in light of their currently limited capacity and growing pains typical of any newly established National Park. By doing so, we budget more time for planning activities and carefully involve park staff at all stages of an activity.

We have also learnt that close collaboration with other local partners greatly improves and expands upon our awareness activities. This is particularly evident in our close relations with the DET, Department of Radio and Broadcasting and Commune authorities. We also hope to establish greater co-operation with the District Ministry of Fisheries in the coming months of the project

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