

# Cuc Phuong Report

## News from the Cuc Phuong Conservation Project

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### Distribution

The present distribution of the Cuc Phuong Report is 342, including 147 institutions, government agencies, and non-government organizations.

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### NTC: Pioneering a Vietnamese Response to Conservation Education

The National Training Center for Conservation Awareness and Education (NTC) is rapidly developing to meet the educational and training needs of staff at Vietnam's parks and protected areas. Built upon the success of the Cuc Phuong Conservation Project, the NTC provides opportunities for others to gain experience from Vietnamese experts with nearly four years of active field experience administering a successful conservation awareness program in local communities and schools, as well as with visitors at the Cuc Phuong National Park.

The NTC will soon offer a range of training courses available aimed at increasing basic knowledge and understanding about nature, the environment, and key conservation issues amongst principal stakeholder groups (e.g. protected area staff, local teachers, Youth Union, rangers, etc.), or building specific skills in response to identified training needs, such as "visitor interpretation" and "protected areas management".

Alternatively, longer-term programs are presently available to train staff responsible for developing and implementing successful community-based education initiatives or visitor education programs within specific project areas.

“What is most important about the NTC is that we offer an opportunity for the staff of parks and protected areas, and those responsible for administering community-based and visitor interpretation programs, to learn from a successful program run by Vietnamese at Cuc Phuong” says Project Coordinator Vu Thi Quyen. “This is a Vietnamese solution in response to Vietnamese needs.”

The Conservation Awareness Program at Cuc Phuong is presently active in all four districts that border the park. More than 15,000 primary and middle school students from 43 schools participate through Conservation Clubs established at each local school. The program is carried out by counterpart teachers and local staff hired and trained from the park, local Youth Union, Teachers’ College, and other area institutions. More than 2,400 club meetings have been held since the program began in 1996, each featuring a prepared lesson aimed at increasing local understanding about nature and the environment, as well as encouraging greater participation in helping to protect the park.

The Conservation Awareness Program at the same time carries out a village-based education program for adult residents, presently completing its second round within local communities, and reaching another 15,000 to 20,000 residents thus far.

A third educational component of the Conservation Awareness Program focuses on park visitors, and is aimed at enhancing the educational value of visiting the park through visitor interpretation and special educational activities administered by the project. A major development for the visitor education program has been the establishment of a Visitor Interpretation Center at the park, presently open to visitors, but still undergoing its finishing touches.

While the advancement and progress of the project’s environmental education initiatives has been a major accomplishment for the project, the most important achievement has been the development of a well-trained and experienced staff, with the capacity to run the program on their own, and train others.

In 1999, the NTC carried out its first formal training effort for core staff of the Social Forestry and Nature Conservation (SFNC) project at Pu Mat. After eight weeks of training, Pu Mat staff returned to the nature reserve to develop a community-based environmental education program of their own. As of April 2000, the program became operational, and is currently active in seven schools of two communes, with more than 2000 student club members. The Pu Mat staff have begun the process of establishing and training a strong local staff contingent that will later assume leadership of the program.

As the NTC continues to prepare for the transfer of leadership of the Cuc Phuong program to park and local staff, Ms. Quyen is optimistic that staff possesses the skills to manage the program beyond early 2001 (when the transfer is to occur). “They are essentially running the program now, though we are working with local leadership to develop their management and other skills that will support administration of the program. At the same time, our focus is changing, using the program at Cuc Phuong to help other parks and protected areas establish successful programs elsewhere in Vietnam.”

“All too often ‘international volunteers’ are brought in to Vietnam to do this sort of work,” says Ms. Quyen. “While we are not denying the need for international expertise in some areas, environmental education has advanced through our efforts at Cuc Phuong, as well as the efforts of a few other projects in Vietnam. The NTC is a successful model built on Vietnamese expertise and experience, and should be used to benefit other projects with similar protected area management and conservation goals.”

### **The NTC**

- ⌞ Training for staff of projects on development, management and implementation of Conservation Awareness Programs
- ⌞ Educational Programs for Park/Nature Reserve staff and local stakeholders
- ⌞ Specialized training and educational programs for focus groups

For further information about the NTC, please contact Ms. Vu Thi Quyen: 030 848004 or [cpcp@fpt.vn](mailto:cpcp@fpt.vn).

### **National Highway Project: Through Us or Around Cuc Phuong?**

Rumors of roads cutting through the park gained momentum in March with several reports published in national newspapers announcing plans by the Transportation Ministry to begin construction of the Ho Chi Minh Highway, extending 1690 km southward from Ha Tay Province, west of Hanoi, along the western side of the country to Ho Chi Minh City. The road will provide Vietnam with its second major transportation route linking the north and south, as well as improving access to western regions of the country.

However, plans call for the road to breach the borders of at least ten National Parks and Nature Reserves, including Cuc Phuong National Park, according to maps illustrated in the national press. The Cuc Phuong portion of the road would bisect the park through the western Buoï River Valley, effectively slicing off about 20% of the park's forested area west of the river, and exposing the core zone to increased levels of human disturbance.

When press reports surfaced in March of 2000 confirming intentions to build the highway through the park, the Ministry of Agriculture and Rural Development (MARD), along with park managers and representatives from key national scientific institutions and agencies, quickly mobilized to respond to the threat to Cuc Phuong's future.

A workshop, hosted by the Vietnamese Forum of Environmental Journalist (VFEJ) brought relevant ministry representatives (e.g. Transportation Ministry and MARD) together with scientists, park managers, conservation organizations, and national journalists to discuss the project in an open forum. Opposition to the road stemmed mainly from concern that the highway would impact the ecological integrity of Vietnam's first national park by dividing western and eastern sections of the park along the river valley, as well as exposing the core forested interior to increased levels of human access and resource exploitation. Dr. Nguyen Ba Thu, Director of the National Forest Protection Department, referred to the park as a home that, once divided, can never function the same again. Opponents urged that the highway be re-routed around the eastern end of the park, where the impacts will have much less influence on the park's forest ecosystem.

Key stakeholders were subsequently requested to provide input to the national government, and initial reports (as of May 31) suggested that the national government had made the decision to route the highway around the eastern end of the park. Formal confirmation of this decision is still pending.

## Conservation Awareness Program

### CAP Reaches Fourth District

The Conservation Awareness Program reached its fourth and final district in February, launching the school-based Conservation Clubs in Yen Thuy District. Yen Thuy District had been waiting for the program to begin in schools since early 1998, but initial efforts focused on reaching remote communities within and along the western and southern border of the park. The addition of Yen Thuy brings the total number of schools involved in the program to 43, with more than 15,300 Primary and Middle School children actively participating within Conservation Clubs organized at each school. More than 2,400 club meetings have been held since the program began in 1996. Thirty-two counterpart teachers from local schools partner the program along with 11 local staff from the park, Youth Union, teacher training colleges, and other local institutions.

Each day, five teams head out to local schools on motorbikes, some traveling for nearly three hours to reach the most remote areas around the park. Often they are met by children eagerly awaiting the opportunity to become involved with the Conservation Club's mixture of discussions, games, and activities, aimed at encouraging greater understanding about nature and the environment, as well as the need to help protect the park and its natural resources. Students have demonstrated that they share an interest in protecting the future of Cuc Phuong through their commitment to the club and participation in Conservation Club activities.

"The process of changing people's attitudes and developing an appreciation for nature is a long-term process for which we can not expect changes overnight" says Nguyen Hai Hau, the project's Education Program Officer. "This investment in education forms the foundations that will support change over time," Ms. Hau added. "Even now we begin to see the changes in small ways each day." Ms. Hau noted that the willingness of students to become involved in activities outside of the club (such as working on the club newsletter, *Green Forest*, picking up litter, and participating in performances of the Village Program within their communities), show that they possess a keen interest in becoming more involved in protecting the park. At the same time, feedback from parents and teachers, as well as the willingness of students to express their ideas about nature and the need to protect the park, demonstrate a visible change within these communities.

One exercise that has helped project staff assess student interest and knowledge is the "Cuc Phuong Debate". Visiting local students are divided into groups (park management, rangers, local communities, animals and plants, and tourists) and asked to present arguments in support of their interests as stakeholders. "You would be surprised by the realistic and knowledgeable responses from these student groups that emerge during these lively exercises" says Vu Thi Quyen, the project's coordinator. "The arguments are real, and often emotional, with different groups defending their interests and concerns for the right reasons." More than often, the debates end in unresolved issues. For example, all the stakeholders frequently end up agreeing that without efforts to increase the local standard of living, local people will remain (at least in part) dependent on certain resources from the park. "We see a reflection in the actual positions that exist" says Quyen. "But more importantly, students are able to visualize and assume the roles of the park, plants and animals, and even tourists, and support their positions well, demonstrating understanding of the issues."

During a recent competition, "Community Voice in Conservation and the Environment", students were asked to submit their ideas in stories, poems, songs and drawings about nature at Cuc Phuong. The project staff were overwhelmed with well over 1200 entries, including many excellent expressions of the student's ideas that clearly reflected the strong attachment and appreciation for nature shared by residents living around the park.

Examples of some of the best entries are presently displayed in the Visitor Interpretation Center's special exhibit, "The Voice of Local Communities".

## CAP Program Activities Highlights

### ***Star Students Help Produce Green Forest Newsletter***

Star Students, Hoang Dung Minh (Yen Quang Middle School), Nguyen Thi Muoi (Ky Phu Middle School), Dinh Thi Diu (Van Phuong Middle School), and Nguyen Huong Lan (Ky Phu Middle School), joined project staff in helping to draft and assemble the Conservation Club newsletter, *Green Forest*. Star Students are members of the Conservation Club who have demonstrated through their involvement in club activities a strong interest in helping protect Cuc Phuong National Park. Special visits and involvement in conservation activities are organized for these exceptional students, during which time they are given the opportunity to participate in the project's activities, and become more knowledgeable about conservation efforts at the park.

### ***Local Staff Computer Training***

Computer training for local staff began in May following the arrival of several computers donated by Compaq Corporation. After two initial workshops, enthusiastic local staff spent their off hours practicing and becoming familiar with simple word processing functions and the use of computers. The specialized training program is part of the project's efforts to build the skills of local staff in administering the school-based education program, in preparation for transfer of the program to local leadership early next year.

### **Calendar of Education Program Events this Period**

The Conservation Awareness Program continued with its usual host of special educational programs and activities (in addition to administering the regular school-based Conservation Clubs).

February 1-11	Tet Holiday	Staff break
February 11	Tree planting	Local staff help park plant trees at Bong Center
February 14	Puppet show I	Yen Quang Primary and Middle School (4 shows)
February 17	Puppet show I	Van Phuong Primary School (2 shows)
February 17	Puppet show I	Cuc Phuong Primary school (2 shows)
February 18	Village Program 2	Yen Thuy village, Yen Quang commune
February 19	Village Program 2	Yen Phu village, Yen Quang commune
February 20	Village Program 2	Yen Thinh village, Yen Quang commune
February 22	Conservation Club	School-based program expands to Yen Thuy District
February 27	Student visit	45 students from Thach Lam Primary and Middle School
February 28	Puppet show II	Ngang River Valley schools (Cao Dang)
March 3	Star Student Visit	Star Students help write <i>Green Forest</i> newsletter
March 8	Village Program II	Yen My village, Yen Quang commune
March 11	Training workshop	Conservation and the Environment
March 17	Training workshop	ITW: Staff training: Turtle Ecology and Conservation
March 25	Training workshop	Conservation and the Environment
March 29	Teacher Workshop	25 counterpart teachers from four districts
April 10	Puppet show I	Yen Nghiep Primary and Middle schools (4 shows)
April 15	Training workshop	Conservation and the Environment
April 17	Puppet show I	An Nghia Primary and Middle schools (2 shows)
May 7	Teacher workshop	24 counterpart teachers from three districts
May 9	Puppet show I	Ngoc Luong Middle School
May 11	Village Program	Yen Minh village, Yen Quang commune
May 20	Training workshop	Conservation and the Environment
May 27	Teacher Visit	21 teachers from Yen Nghiep Middle School
May 28	Student visit	50 students from Thanh Yen Primary and Middle schools

## National Training Center News

### **Pu Mat Launches Conservation Awareness Program**

Congratulations to Mr. Dau Phi Tu, Nguyen Van Luan, and the local staff based at the Pu Mat Nature Reserve for successfully initiating their community-based conservation awareness program in seven local schools bordering the reserve, Nghe An Province. The school-based program began April 3<sup>rd</sup>, and currently involves about 2,000 students in Mon Son and Luc Da communes. Fourteen counterpart teachers have also become involved in the program, and the Pu Mat team is actively training six local staff from the reserve and local institutions.

The Pu Mat core staff were the first group to receive formal training through the National Training Center (NTC) at Cuc Phuong National Park. A principal aim of the NTC is to improve the quality of community-based environmental education programs in Vietnam, through provision of training for the staff of education projects within other parks and nature reserves.

### **NTC Program Activities**

The National Training Center carried out a number of other short-term training and orientation programs during the last project period, including hosting a visit by the staff of a Cambodian NGO, Mlup Baitong, currently running a conservation awareness program at Kirirom National Park in Cambodia. The one-week orientation tour enabled Mlup Baitong staff members Cheng Chanthol, Kung Seakly, and project coordinator Amanda Bradley to observe Vietnam's longest-running community-based environmental education program in action. The visit also permitted NTC staff to exchange ideas with the Cambodian program, and establish important links with another regional program that will facilitate future exchanges and sharing of information.

The NTC also hosted orientation visits for rangers and park staff from the Pu Mat Nature Reserve, Tam Dao National Park, and Ba Vi National Park, during which NTC staff leaders discussed the role of environmental education in protected area management and conservation, and presented the community-based program.

Fifteen representatives from the Dac Lac Provincial Youth Union also visited the NTC in May, as part of their efforts to learn more about the fundamentals of running a community-based environmental education program. The Dac Lac Youth Union plans to develop a similar program in the near future, funded by the National Environmental Agency (NEA). The NTC is currently considering the feasibility of initiating a training program for the Dac Lac program administrators, and strengthening ties with the provincial Youth Union in support of the Dac Lac program.

## Visitor Education Program

### Visitor Center Opens its Doors

Cuc Phuong's Visitor Center finally opened its doors to park visitors in late May after completion of the first seventeen informational exhibits depicting the park history, values and ecology. Progress continues in the development of three additional exhibits (human impacts, endangered species and the wildlife trade, and conservation efforts at Cuc Phuong National Park), as well as the "Science Room" that will feature three large aquariums built into one of the walls, live invertebrates, activities for children, and interesting information about plants and animals native to Cuc Phuong.

The Visitor Center, supported with funds from AusAID, is expected to host a formal opening in July once the interior is complete, which includes completion of some of the more interpretive hands-on exhibits that supplement the informational displays. In the meantime, the project is using the initial month to learn how to manage visitors in the center and develop a program for dealing with large student groups.

Efforts have also begun to develop the outside garden area behind the center that will include a butterfly garden, forest regeneration plot, bird viewing area, and a number of interpretive exhibits focusing on the parks flora (e.g. plant defenses and adaptations, pollination, medicinal plants, etc.). Completion of the garden is scheduled for late 2000.

The project has hosted a number of visits by the staff and management of other National Parks and projects with similar plans to build visitor centers. While most of the project development staff agree that they would never want to go through the development process again, they have gained a wealth of experience and knowledge that could become useful in assisting other parks and projects with similar intentions. "Much can be learned from our experience, and more importantly our mistakes" says Project Coordinator Vu Thi Quyen. "We will help others in any way we can, short of doing this again."

For more information (time and dates) on the official opening ceremony for the Visitor Center, please contact Vu Thi Quyen after July 10. Tele. 030-848004

## Project Guest Book

Feb. 28: Ahmed and Melinda Bektas, AFAP.

March 3-4: Joe Peters, American Fulbright Scholar working on environmental awareness program networking in Vietnam.

March 4: Fernando Potess and Maurice Gallen, PARC Project, Na Hang – Ba Be, and Colin McQuistan, UNDP, investigating the possibility of developing a community-based environmental awareness program at Na Hang – Ba Be through the NTC.

March 13 – 16: Peter Paul van Dijk, TRAFFIC SEA Coordinator. Three days of opportunistic amphibian surveys at Cuc Phuong with staff biologist Le Trong Dat.

March 13-16: Soc Son Rescue Center rangers. Turtle Conservation and Protection workshop for rangers.

March 18: Nguyen Van Tuy, Tourism Department head, Yok Don National Park.

March 19: Craig Liesher of UNDP and Ross Hughes, Birdlife

March 21: Andrew Grieser Johns and 25 rangers from Pu Mat Nature Reserve and local districts for orientation on the role of conservation education in protected area management.

April 9: Dianne Hayes, Melbourne Zoo.

April 26: Keith Foster, Care International. Research on Tam Dao National Park.

April 27: Ninh Binh provincial rangers. Turtle Conservation and Protection workshop for rangers.

April 30 – May 2: Mr. Hoai, Voice of Vietnam. Three days participating in project activities as part of the project's public awareness program.

May 8-11: Amanda Bradley, Kung Seakly, and Cheng Chanthol, of Mlup Baitong working at Kirirom National Park, Cambodia. One-week orientation program through the NTC.

May 9: Fernando Potess, Les Clarke, and Lisa Choegyal of the PARC project at Na Hang and Ba Be. Examining progress on the Visitor Interpretation Center in preparation for development of a visitor center(s) at Na Hang – Ba Be.

May 19-20: Nola Chow, World Bank Environmental Consultant, Washington, D.C. Researching park protection and conservation projects during her visit to Vietnam.

May 24: Professor Hoang Hoe and 40 staff from Tam Dao and Ba Vi National Parks for an orientation tour of the NTC on environmental education and visitor interpretation.

May 25: Luong Vinh Linh, Dac Lac's Chu Y Angsin Nature Reserve, and Dac Lac Youth Union visit the NTC for an orientation on community-based environmental education programs.

May 23: Hanoi Forest Protection Branch rangers. Turtle Conservation and Protection workshop for rangers.

## Biological Research Programs

### **Two New Owston's Births Mark Fourth Successful Year of Breeding**

The Chrotogale Breeding Project welcomed the birth of two Owston's palm civets during the late evening of May 1<sup>st</sup>, and early morning of May 2. The two new-born civets were successfully delivered under the care of project biologist Le Trong Dat and park veterinarian, Ule Streicher, bringing the total number of civets in the program to nineteen, twelve of which were born in captivity at Cuc Phuong. The remaining seven adults were received by the project from rangers after being confiscated from the illegal wildlife trade between 1996 and 1999.

The Owston's palm civet is a globally threatened small carnivore native to Laos, northern Vietnam, and southern China. Loss of habitat and hunting represent the most serious threat to this forest-dwelling species. The Chrotogale Breeding Project is focused on conservation of the species through captive breeding for genetic preservation, and raising public awareness about the need to protect remaining wild populations. Owston's palm civets are valued for their meat, and alleged medicinal properties. In 2000, two civets will be released at Cuc Phuong with radio collars as part of an experiment to assess the feasibility of translocation as a conservation option.

### **Night Amphibian Surveys at Cuc Phuong**

Cuc Phuong National Park was fortunate to receive another visit from regional herpetologist Peter Paul van Dijk, presently serving as TRAFFIC's coordinator for Southeast Asia. Dr. van Dijk and project biologist Le Trong Dat spent several nights in the forest recording frog calls and cataloguing the seasonal frog fauna. Peter Paul is in the process of putting together a book on the region's amphibians that will be digitized and available on CDROM, including recordings of the calls of many of the region's species. In addition to sampling the park's amphibians, Peter Paul and Mr. Dat managed to stumble across a black-striped mountain racer (*Elaphe porphyracea nigrofasciata*), not previously recorded for the park.

Subsequent amphibian survey work after Peter Paul's visit resulted in two additional new snake records for the park, including *Oligodon cyclurus* and *Ophites ruhstrati*.

### **Export of Specimens without National Permits Violates the Law**

Vietnam has always supported the efforts of international scientists conducting research within the country, and contributing to the base of knowledge about Vietnam's unique biodiversity. Working with national counterparts, these efforts also contribute to helping build the knowledge and skills of Vietnam's emerging scientific community. However, like any other country, there are laws and regulations that serve to protect Vietnam's natural heritage, and ensure that such cooperation is in the best interests of the country, as well as serving the needs of science in the best possible way. More recently, regulations governing export of specimens collected in Vietnam have been refined to provide for better management and monitoring of research activities carried out in the country.

Last month, an incident at Cuc Phuong National Park illustrated the difficulties that authorities face with some international institutions that are either unaware of, or choose to disregard Vietnam's regulations. In this case, team of scientists representing a museum abroad received permission to conduct surveys of the park's bat fauna. However, the permission did not authorize the collection of specimens for export, and the group later claimed to be unaware that such permission was required, though it was clearly stated on the national permit (in Vietnamese). As a result, rangers were forced to intervene and confiscate the specimens that had been collected thus far, as well as approximately 100 specimens that had been collected from Huu Lien Nature Reserve in Lang Son Province, also without a valid permit for collection. Disappointed, the group left Cuc Phuong, but reportedly were undeterred by their experience, moving to Sa Pa where further survey work and collection was carried out.

The activities of such “international institutions” may be well intentioned, but clearly are in violation of national law in Vietnam. Furthermore, such incidents breed distrust amongst authorities of the international scientific community, making legitimate scientific research in Vietnam all that much harder for those who respect and follow the laws of the country.

The international scientific community must achieve its research aims within the context of its role of helping Vietnam conserve and protect its natural heritage. Those that choose not to play by the rules, have no business working in Vietnam.

### ***Specimen Export Permits***

Export of any plants or wildlife, including blood, tissue, or other wildlife parts, from Vietnam requires a permit from the National Forest Protection Department (FPD) CITES office. Permits are required for CITES and non-CITES listed exports. There are no exceptions. No other national agency or institution is authorized to issue export permits, and any specimens exported from Vietnam without authorization from National FPD are exported in violation of Vietnamese law.

### ***Research Permits***

Scientific research in parks, protected areas and other regions of the country may be carried out (without specimen collection) by obtaining a research permit directly through the counterpart national institution (e.g. IEBR or FIPI, etc.), or management of the protected area where the research is to be conducted. The counterpart national agency or institution is responsible for obtaining a permit through the National FPD for any research conducted within Vietnam at a park or Nature Reserve.

### ***Arrange in Advance***

International scientists should ensure that export and research permits have been obtained prior to commencing any scientific research in the field. It is best that scientists maintain copies of research and collection/export permits on their person while in the field. For scientists organizing visits from outside of Vietnam, permit applications should be submitted well in advance of their visit to avoid unnecessary delays.

Vietnam has a long history of cooperation with the international scientific community, and has made every effort to encourage and support the work of scientists in Vietnam. The national laws are not intended to make this work more difficult, but rather to ensure that such research is properly monitored, and that the benefits of research meet the conservation and protection needs of the country’s biodiversity. Scientists are asked to respect these laws, just as they would be expected to do so in their own countries.

## **Plants at Cuc Phuong: A Resource with Potential Pharmaceutical Value**

Cuc Phuong National Park is known for its rich botanical diversity, with 28% of all of Vietnam’s plant species represented at the park. As many as 1,983 individual plant species have been recorded thus far, representing 911 genera and 219 families. At least 1,712 of the park’s plant species are angiosperms (flowering plants).

Although the rich flora of Cuc Phuong is a source of genetic diversity that must be protected and conserved for future generations, it is also a resource that may harbor potentially useful plants to man (Nguyen Nghia Thin, 1996), including a potential source of new pharmaceuticals.

A collaborative research project undertaken by the University of Illinois at Chicago (USA), Cuc Phuong National Park and the National Center for Science and Technology initiated a large-scale effort in 1997 aimed at investigating the potential for discovering new medicinal compounds amongst the park’s diverse plant life. Specifically, the project focuses on discovering compounds that may benefit treatment of cancer, AIDS, malaria and diseases that impact the central nervous system, like Alzheimer’s. Research involves conducting extensive inventories of the park’s flowering plants, as well as collection of plant samples with historic medicinal uses. Extractions are then evaluated for active compounds of medical value.

The search for new compounds from plants for drug development is a complex endeavor. The research process is slow (10-15 years to put a drug on the market), arduous, and beset with numerous failures, namely, a low probability that such research will produce compounds that eventually make it to the market (generally there is a one-in-ten-thousand chance that a new drug will be discovered).

Aside from exploring the potential for discovering new medicinal compounds, the collaborative effort provides benefits to conservation of the park through its research on flowering plants, and associated inventories, GIS, and ethnobotany. The project also provides benefits to communities living around the park who participate in the study, through direct support based on their needs (building schools, health clinics, clean water resources), as well as the longer-term potential of distributing royalties back to the communities for any new discoveries that result from the research.

The project is now in its second year of operation, and is scheduled to run through 2003. With the input of a multidisciplinary team of scientists, the cooperation of the country, funding and adequate time, the project hopes to realize the pharmaceutical potential of the rich flora of Cuc Phuong National Park.

Excerpts from a paper submitted by Dr. Djaja Soejarto, University of Illinois (May 13, 2000)

## Turtle Conservation and Ecology Project

### First Tortoise Births at TCEP

On December 9, 1999, one of the project's female elongated tortoises (*Indotestudo elongata*) chose a patch of sunny ground during the late afternoon hours and began digging a shallow nest. The female was one of approximately 480 *Indotestudo* that had been confiscated by Ninh Binh rangers in August 1998. She was also the first of the Turtle Conservation and Ecology Project's (TCEP) tortoises to breed in captivity. The female deposited two large eggs in the hole and covered the nest with dirt. The eggs were later moved to a secure environment where they spent 139 days incubating. During the late evening of April 25, project staff were amazed to see the nose of one of the hatchling tortoises breaking through the shell of its egg. By 4:00 p.m. the next day, the first of two hatchlings had emerged entirely, the second egg hatching four days later (143 days). Both hatchlings promptly took to eating, and are growing rapidly in captivity.

The turtle births mark the first such known breeding in captivity of this species in Vietnam, and an important step forward for the TCEP's fledgling breeding program. Since early March, breeding and nesting by several other species has resulted in additional eggs being laid in captivity, including those from *Cuora galbinifrons* and *Cyclemys pulchristriata*, all currently in incubation.

The TCEP aims to establish a captive breeding population for seven of Vietnam's 22 turtle species, and initiate a head-start program for certain species that will supplement the project's planned translocation efforts. Translocation sites will be selected based on each species' habitat requirements, native range, potential impacts releases may have on existing populations, and the historic level of "genetic disturbance" (e.g. previous releases in the area that may have compromised the genetic composition of local populations).

### ***The Adventures of Lucky Turtle* Contributes to Educational Efforts**

A new educational resource for children focusing on conservation and protection of Vietnam's turtles was printed and released by the project in May. "The Adventures of Lucky Turtle", a three-part illustrated children's story, depicts a forest turtle that is caught by hunters and sold to an evil trader, only to escape while being shipped to China with a truck full of other animals. "Lucky" must (of course) try to find his way home, wary of the dangers that lurk on the road ahead.

The new series is presently being used in the community-based conservation education program, but will also be included in an educational package, focusing on turtle conservation and protection, being developed for distribution to other education projects at protected areas in Vietnam. Special thanks to the Columbus Zoo (USA) for supporting the development of this important resource.

### **Turtle Conservation and Ecology Web Site**

Thanks to the efforts of the New York Turtle and Tortoise Society (NYTTS), the Turtle Conservation and Ecology Project – Vietnam can be found on the worldwide web. NYTTS web-master Jim van Abbema constructed the Web site from information and photos provided by the project in early 2000, and is consistently updating the site with new information and reports that can be read online. Current efforts include development of a Vietnamese language version of the site that will soon be available. The site can be found at <http://nytts.org/vietnam/>

## **TCEP Newsletter - Vietnam**

More information about the Turtle Conservation and Ecology Project is available through the TCEP Newsletter – Vietnam, produced quarterly by the project. To be included on our email distribution, please contact [cpcp@fpt.vn](mailto:cpcp@fpt.vn)

### ***News in Briefs this quarter:***

- ⌞ Ranger training: Increases provincial enforcement capacity
- ⌞ Turtles in Trade: Summary of enforcement actions this period
- ⌞ Wetland Institute: TCEP Turtle Ecologist training
- ⌞ Turtle Facilities: Continue to expand
- ⌞ Turtle Theft and Recovery: A happy ending for three tortoises
- ⌞ Securing the future for Hoan Kiem Lake's giant softshell
- ⌞ PHOTOS of project activities (MS publisher hard-copy version only)

## **Cuc Phuong and Regional News**

### **Ichthyosaura Fossil Discovered at Cuc Phuong**

In February, a local man reported finding a large fossil in the forest set into a block of limestone that included at least 18 visible vertebrae of the animal's backbone. Park scientific staff and four scientists from Hanoi University investigated the report and discovered the fossilized remains of an Ichthyosaura, an ancient sea-dwelling dinosaur. The 85 centimeters of exposed fossilized remains are clearly evident along the face of a large limestone outcrop, and according to the scientists, the discovery marked the first such finding of an Ichthyosaura in Indochina.

Cuc Phuong's limestone hills and rocky outcrops are more than 150 million years old, originating from ancient coral reef and lime-rich mud at the bottom of an ancient shallow sea. Years of sedimentation produced the limestone, later uplifted as geological plates collided, and erosion sculpted the unique karst landscape we find today. Evidence of the fossilized remains of ancient life can be found throughout the park, including coral and algae formations, and passages created by mud-dwelling worms. However, no previous discoveries have been made of vertebrate fossils at the park, and park management is carefully considering how to secure the site to ensure that this new discovery is effectively protected.

PHOTO: Fossilized remains of an Ichthyosaura

### **Leopard Sighting**

A leopard (*Panthera pardus*) sighting along the park's border late last year in Ky Phu commune revived hopes that at least a few of the large cats remained at Cuc Phuong. On May 17, a second leopard was observed by project biologist Le Trong Dat in the park's interior, as he returned from night amphibian surveys in the forest. Rangers based at a station nearby had reported the presence of a large cat in the area periodically over the previous years, but this most recent observation was the first confirmed sighting by a scientist of a leopard within Cuc Phuong's borders in nearly 20 years. The adult leopard observed May 17 was reported to weigh an estimated 45-50 kg.

GRAPHICS: *Panthera pardus* by Mark Grindley

## **Clouded Leopard Healed and Released**

A clouded leopard, confiscated by Ninh Binh Forest Protection rangers in October 1999, and received by the Endangered Primate Rescue Center, was released into the park in February. The clouded leopard was being shipped north on Highway One in the trunk of a car when rangers stopped the trader, also recovering two small Asiatic black bears (also held in the trunk). Wounds to the clouded leopard's left fore leg from a snare trap were treated by the park's veterinarian, Ule Streicher, and the animal was quarantined for a period of four months before release. During its time in quarantine, the EPRC staff expended countless chickens feeding the hungry leopard, and the animal quickly regained its health and recovered from its wounds.

Release of wildlife in Vietnam's national parks and protected areas has been a serious problem in the past. Often large numbers of confiscated animals are released with little consideration given for their habitat requirements, health, native range, or the potential impacts that the released animals might have on existing healthy populations. Cuc Phuong National Park is leading efforts at parks and protected areas to find a more appropriate means of dealing with animals confiscated from the wildlife trade. The ultimate goal is to reach a point where releases can meet established IUCN Guidelines for wildlife releases.

Cuc Phuong National Park releases animals only after appropriate quarantine and health screening. Additionally, habitat requirements and native range are crucial factors in deciding whether animals are released at the park or not. While the current practices are not perfect, they represent a first and logical step in the direction of ensuring a more ecologically sound means of disposing of confiscated animals from the trade, and a reasonable alternative to wholesale releases still carried out at some other parks and protected areas.

## **Staff and Project News**

### **New Staff**

The Cuc Phuong Conservation Project would like to welcome Mr. Trinh Le Nguyen to the core project staff. Nguyen joined the project March 1 and will be working on developing the visitor center, and on training programs administered by the National Training Center (NTC). Nguyen graduated from Vinh University with a degree in education, and worked briefly with the staff of the conservation awareness program at Pu Mat Nature Reserve. Nguyen is undergoing a year of experience training through the NTC before being certified as a NTC Program Officer, after which he will be responsible for developing and administering a conservation education program at another protected area in Vietnam.

The project would also like to welcome Mr. Nguyen The Cuong as the project's second turtle ecologist. Cuong recently graduated from the Xuan Mai Forestry College and initially volunteered for the project to pursue his interest in turtles. Mr. Cuong will take over responsibilities for the project's resident turtle ecologist, Le Thien Duc, during Duc's eight-week training tour with the U.S.-based Wetlands Institute, beginning June 26.

### **Wedding Days**

Congratulations to Ms. Tran Hong Thu and Mr. Dinh Trong Thu, who were married April 25 in Hanoi. Ms. Thu and Mr. Thu, both original core staff of the Cuc Phuong Conservation Project, met in 1996 through their work on the project. Mr. Thu later returned to Hanoi while Ms. Thu went on to lead the Conservation Awareness Program, and serve as the project's Education Officer. Ms. Thu left full-time employment with the project in January and remains a project associate, continuing her role in an advisory capacity.

## Bulletin Board

### Project Staff Needed

The NTC is presently looking for several exceptional new core staff members available to train at Cuc Phuong before working at other project sites in Vietnam. College degree, fluent English language (verbal and written skills), background in biology or environmental studies, marine ecosystems, tourism, education, or English language is a requirement. Join a hard-working team of Vietnamese experts engaged in the country's leading community-based conservation education project. Applications: Contact Ms. Men in person, Monday through Wednesday at 104B Pho Hue. No phone calls will be accepted.

### New Resources Available for Vietnam

**Wildlife in Trade:** A new resource for wildlife protection authorities produced by TRAFFIC Vietnam (Vietnamese) includes color photos or illustrations, a description, and information about the ecology and range of Vietnam's most heavily traded wildlife, including birds, reptiles and amphibians, and mammals. The resource is intended for use by rangers within protected areas and parks, as well as provincial authorities and border guards to help them identify animals within the trade in order to improve enforcement and monitoring of trade volumes. Contact TRAFFIC Vietnam: Mr. Man at 822-0640.

**Birds of Vietnam:** Bird Life International has just released a field guide on the Birds of Vietnam (in Vietnamese). The 250-page book includes excellent illustrations of the country's bird fauna. Copies may be purchased through Birdlife International, Hanoi. Contact Birdlife International at 851-7217 or email them at [Birdlife@birdline.netnam.vn](mailto:Birdlife@birdline.netnam.vn).

**Primate Field Guide:** Fauna and Flora International has released a pocket field guide for the Primates of Vietnam, complete with color photos, description, and range maps (Vietnamese and English). Contact FFI: Ms. Ha at 943-2293 or email [ffi@fpt.vn](mailto:ffi@fpt.vn).

**Cat Tien Rhinos:** WWF Cat Tien has produced an excellent educational storybook, "A Treasure in the Forest" about the rhinos of Cat Tien National Park. The booklet is available in Vietnamese and English. Contact WWF at 822-0640

**Primates Poster:** Two new posters on primates have been released. One poster produced by the Endangered Primate Rescue Center (EPRC) includes illustrations of all of Vietnam's 20 primate species. A second poster produced by Fauna and Flora International focuses on langurs and gibbons of Vietnam. EPRC: Contact Ule Streicher at (030) 848002. FFI: Contact Ms. Ha at 943-2293 or [ffi@fpt.vn](mailto:ffi@fpt.vn)

## Outputs of the Cuc Phuong Conservation Project

**Conservation Awareness Program Resource Guide:** A complete guide to lesson plans 1-15 and resources used in the Conservation Awareness Program at Cuc Phuong National Park (English/Vietnamese)

**Conservation Awareness Program Film:** A film produced by Ninh Binh TV about the Conservation Awareness Program and how education is being used as a major force in helping protect Cuc Phuong National Park (Vietnamese)

**The Kitchen God Comes Late:** A conservation-focused storybook for children (Vietnamese).

**Conservation Club Booklet:** A membership and activities booklet distributed to all new Conservation Club members who join the program in 1999 (Vietnamese)

**Wildlife Trade Poster:** An anti-wildlife trade poster, featuring a pigmy loris and discouraging foreigners from buying wildlife in Vietnamese markets.

**Draft Management Plan for Cuc Phuong National Park:** A draft plan based on the results of the park's 1998 Management Planning Workshop.

**"Green Forest" Conservation Club Newsletter:** Quarterly editions distributed to Conservation Club members. Eight issues available.

**Bat Report 1998:** The final report for 1998 summarizing the results of the year's bat surveys.

**Butterfly Report 1998:** An interim report summarizing the findings of the 1998 year-long butterfly study at Cuc Phuong carried out in cooperation with the Institute of Ecology and Biological Resources (IEBR), Vietnam-Russian Tropical Center, Cuc Phuong National Park, and the Cuc Phuong Conservation Project.

**Snails of Cuc Phuong:** A report by J.J. Vermeulen on snail fauna at Cuc Phuong (1998).

**Owston's palm civet program summary:** A preliminary report by wildlife biologist Shelagh Rosenthal on the Owston's palm civet breeding project at Cuc Phuong National Park (featured in the IUCN Small Carnivore Specialist Group publication)

**Aquatic Resources of Cuc Phuong National Park:** A comprehensive study by Douglas Hendrie of aquatic resource use by local communities surrounding the park, including identification of the park's water resources and an assessment of local impacts upon these resources.

**ABC Animal Poster:** An ABC poster for children of animals used in the school-based Conservation Clubs junior primary level education program.

**Village Program Film:** A film produced for the Village Program by Ninh Binh TV about the values and threats to Cuc Phuong National Park, featuring local residents discussing how the park has changed over time, and some of the alternative economic activities people are involved with that reduce their dependence on forest resources. (Vietnamese).

✕ **NEW The Adventures of Lucky Turtle:** An illustrated children's story about a turtle that is captured by hunters, escapes, and must find his way home. The book is aimed at increasing the reader's understanding about the unique ecology, threats and conservation needs of Vietnam's turtles, and is used as a resource within the project's education programs. (printed in Vietnamese/English text available)

### Wildlife Trade Observation Reports: Vietnam

Detailed information relating to observations within the wildlife trade are detailed in quarterly reports by the project to TRAFFIC SEA. To be added to our distribution list or receive electronic copies of current or past reports, please contact: [cpcp@fpt.vn](mailto:cpcp@fpt.vn).

# The Cuc Phuong Conservation Project

*Brief summary – May, 2000*

## Cuc Phuong National Park

Cuc Phuong National Park was established in 1962 as Vietnam's first national park. Located only 120 kilometers south of Hanoi, Cuc Phuong is one of the last large fragments of protected forest in northern Vietnam and remains the flagship of Vietnam's national park and protected area system.

The park encompasses an area of 220 square kilometers of rich tropical forest set on limestone hills and mountains, forming a green island amidst the intensively farmed lowland area that surrounds the park. Cuc Phuong is ecologically important for its diverse botanical composition, with 28% of all plant species in Vietnam represented at the park. The park is also home to a diverse variety of endangered and threatened wildlife including Delacour's langur, the clouded leopard, Owston's palm civet, and a number of endemic species. A total of 88 mammal species are known to occur in the park, in addition to over 300 bird species, and approximately 50 reptile and amphibian species.

The park is valued as an important site for tourists, receiving about 40,000 visitors each year. Several caves within the park remain sites of national cultural importance, where the bones of prehistoric humans have been discovered. Additionally, local communities retain strong ties to former village and gravesites within the park

### **Threats to the Park**

There are approximately 2000 residents, mostly of the Muong ethnic minority, living within the park borders, and an additional 50,000 people occupying the surrounding buffer zone. Many of these people are dependent upon the park's natural resources for their livelihood. Cutting of timber, collection of firewood and other forest products, clearing of land for agriculture and hunting threaten the park's forest ecosystem. Although protection efforts continue to be strengthened, these efforts alone can not address the conservation and protection needs of the park.

## About the Cuc Phuong Conservation Project

### **Objectives**

The Cuc Phuong Conservation Project, administered by Fauna & Flora International (FFI), was established in 1996 with a grant from the BP Statoil Alliance. In response to the threats posed by human encroachment from neighboring communities bordering the park, FFI has developed and implemented a multifaceted approach to assist the park with protection and conservation of its unique biodiversity.

FFI also manages two species-focused conservation programs based at Cuc Phuong National Park, aimed at helping provide protection for species threatened by the illegal wildlife trade.

The project has concentrated in five principal areas to achieve these goals:

*Socioeconomic Research:* Research within local communities aimed at developing a better understanding of the relationship between these communities and their use of resources from within the park. The results of our socioeconomic research will be used to identify development projects and activities that will reduce local dependence on forest resources.

*Conservation Awareness Program:* Enhancing the level of people's awareness and understanding of nature, conservation, and Cuc Phuong National Park through programs established in local schools (Conservation Clubs), within hamlets (Village Program), and at the park (Visitor Education). Building upon the experience of the Conservation Awareness Program, the project has more recently expanded its

focus through development of a National Training Center for Conservation Awareness and Education (NTC), providing training and educational programs for the staff of other protected areas throughout Vietnam.

*Biological Research and Monitoring:* Research on the park's flora and fauna to establish baseline information about the park's biodiversity. The results derived from the project's studies are aimed at providing park managers with the ability to effectively monitor changes over time, and to address protection and conservation priorities. Additionally, research at Cuc Phuong contributes to regional and international knowledge about forest ecosystems and Vietnam's native fauna and flora.

*Institutional Capacity Building:* Providing training opportunities and experience that support the development of strong professional skills amongst park and project staff, as well as national institutions and organizations. Working with local organizations and institutions (Youth Union, District Education Department, Women's Union, schoolteachers and community leadership) to develop relationships that will enhance conservation efforts and ensure sustainability of existing programs.

*Species Conservation:* The project administers two species-focused programs aimed at the conservation of wildlife threatened by illegal trade; the Owston's Palm Civet Breeding and Ecology Project and the Turtle Conservation and Ecology Project. Both of these projects are broadly focused at the national level.

## Funding

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*Turtle Conservation and Ecology Project Funding*

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Melbourne Zoo  
American Zoo and Aquarium Association (AZA)  
James Bazyk Fund  
WWF Japan  
Rotterdam Zoo  
WWF – Sweden  
Humane Society International (HSI)  
Douglas B. Hendrie Conservation Fund

## Staff of the Cuc Phuong Conservation Project (May 31, 2000)

### Project Management

Douglas Hendrie, project manager  
Vu Thi Quyen, Project Coordinator

### Core Staff

Ms. Hoang Thi Hanh, Program officer  
Ms. Nguyen Hai Hau, Education Training Officer  
Mr. Le Trong Dat, Biological team leader  
Mr. Trinh Le Nguyen, Visitor Center Development  
Mr. Mark Grindley, NTC Field Prog. Officer  
Mr. Mark Deters, Visitor Center Devel. coordinator

### Species Conservation/Biological Program

Mr. Huong Van Nguyen, Civet keeper  
Mr. Dinh Van Binh, Turtle Keeper  
Mr. Nguyen The Cuong, Volunteer (TCEP)  
Mr. Le Thien Duc, Field Staff

### Conservation Awareness Program (local staff)

Ranger Luong Ngoc Voi, CAP Program leader  
Ms. Ha Thi Thanh, CAP  
Ms. Le Thi An Tinh, CAP  
Ms. Luu Thi Huong, CAP  
Ms. Dinh Thi Hoang Lan, CAP  
Ms. Luong Thi Vinh, CAP  
Ms. Do Phuong Hoa CAP  
Ms. Nguyen Thi Nga, CAP  
Ms. Vu Thi Ha, CAP

**Support Staff**

Mr. Nguyen Xuan Giao, Driver  
Ms. Ngoc Thi Men, Visitor Center Support staff  
Mr. Dinh Van Tha, Security  
Mr. Pham Huy Huay, Security

**Advisors**

Shelagh Rosenthal, Owston's palm civet research  
Dr. Mike Hill, Biological Advisor

**Project Associates**

Ms. Tran Hong Thu, NTC Education Program  
Mr. Dinh Trong Thu, Socioeconomic program  
Mr. Nguyen Quang Truong, TCEP Field Biologist

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