### **CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT**

Organization Legal Name:	WWF
Project Title:	Urgent research to safeguard the Javan rhino in Vietnam
Date of Report:	21 <sup>st</sup> June 2011
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#### **CEPF Region: Indo-burma**

Strategic Direction: 1. Safeguard priority species in Indochina by mitigating major threats

#### Grant Amount: \$16,166

### Project Dates: 16<sup>th</sup> December 2009 to 31<sup>st</sup> May 2011

# Implementation Partners for this Project (please explain the level of involvement for each partner):

Cat Tien National Park (CTNP) – the primary partner for this project. CTNP provided logistical and administrative support to the survey, as well as making two technical staff and two to three Forest Protection Department rangers available to join the survey in the field at any one time.

Queen's University was sent the faecal and tissue samples in 2010 and are presently completing the genetic analysis to determine the population status (results expected in July 2011).

Institute of Zoology, Zoological Society of London conducted hormonal analyses on the faecal samples sent to them by this project on a cost only basis.

Packleader LLC provided two trained detection dogs for the duration of the survey.

The IUCN SSC Asian Rhino Specialist Group will be informed of the results of the survey and apply similar survey techniques to other SE Asian rhinoceros populations.

### **Conservation Impacts**

# Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

The project will determine the status of one of the most endangered taxa in Indochina, the uncertainty of which has undermined efforts to conserve the species in the past. If the genetic analyses confirm that there is a population of Javan rhinoceros remaining (1 male and 1 female) then WWF and partners will move towards implementing appropriate conservation actions. However, it is very possible that the population is no longer viable, in which case no further action for this population can be taken, but results will be publicised in the national and international media.

# Please summarize the overall results/impact of your project against the expected results detailed in the approved proposal.

We have successfully completed a comprehensive survey of the Javan rhinoceros population in Vietnam. Genetic analyses are still ongoing, so final results of the population status are expected by the end of July 2011. Hormone analyses of the faecal samples has been completed, which was undertaken to try to determine the reproductive status of the Javan rhino population.

The genetic analyses were completed in July 2011. DNA was extracted from 17 of the 22 faecal samples collected (77%). Analysis of the faecal samples against a control set of Javan rhinoceros bone and tissue samples, revealed that all of the faecal samples that were able to be genotyped were from the same individual, and that this genotype matched that of the skin samples taken from the rhino that was found dead in CTNP in April 2010.

The team also conducted bacterial diversity profiling of the faecal samples. This is a technique proven in humans; the bacterial diversity profile of faeces can discriminate between different individuals. Although this method has not been tested across all rhinoceros species, the results from the Javan rhinoceros faecal samples collected in 2009/10 all appear to be from one individual, providing support for the genetic work. Furthermore, duplicates of faecal samples collected by the CTNP Conservation Project and CTNP between 2003 and 2006 were also sent to Queen's University, and although they could not be genotyped due to the age of the samples, the bacterial diversity profiles were conducted. The results showed that in the 2003-2006 faecal samples (20 samples in total), there were faeces from two different individuals. Only four of the twenty samples appeared to belong to the individual that was alive in CTNP in 2009 and early 2010, the remaining 16 were from a different rhino.

The genotyping, bacterial diversity profiles and the survey data (no new footprints or dung were found in the last 2 months of the survey, when previously they were found on a regular basis) combine to provide strong evidence that the Javan rhinoceros is now extinct in Vietnam, and therefore from mainland Asia..

#### Please provide the following information where relevant:

#### Hectares Protected: Species Conserved: Corridors Created:

Since the population was discovered in 1988, we have never known exactly how many Javan rhino remained in CTNP and this has hindered government support for more stringent management of CTNP for the rhinoceros population. Habitat encroachment, disturbance and illegal hunting remain major threats to CTNP and have not been effectively managed. The techniques for conducting a genetic analysis of the Javan rhinoceros population have only just become available, hence why the survey was conducted at this time. Although it would have been beneficial to conduct the survey at least a few years earlier, this was not possible, and had WWF not been present and conducting a rhinoceros survey in CTNP at this particular time, we may never have known about the individual Javan rhinoceros found dead by local people at the end of April 2010 and we would probably never have known that it had been a victim of poaching. The rhino had been shot (a bullet was found lodged in the front left leg bone by WWF staff members) and the horn had been removed.

Following this tragic finding, a report was released by CTNP to the Vietnamese government stating that the rhinoceros had died naturally. To try to determine the accurate cause of death WWF subsequently arranged for a pathological examination to be conducted (report submitted by email), which concluded that it was likely the individual died as a result of being shot. WWF and CTNP submitted the report to all relevant local and provincial police departments, national Environmental Police, the Ministry of Agriculture and Rural Development and the Ministry of Natural Resources and Environment. The report and a press release were also sent to the national media.

# Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

We are very close to being able to confirm the status of the Javan rhino population in Vietnam. Unfortunately the genetic analyses have been considerably delayed by the CITES permit process. Permits from CITES Canada and Vietnam were required to export/import tissue samples taken from the individual found dead in CTNP in April 2010. This took 6 months, much longer than originally anticipated and resulted in delays to the analyses of the faecal samples at Queen's University.

#### Were there any unexpected impacts (positive or negative)?

The fact that we could confirm that possibly the last Javan rhinoceros in Vietnam was poached, has enabled us to work with our provincial government partners to strengthen protection in priority protected areas in Vietnam in some cases. WWF Greater Mekong Programme has also responded to this very effectively, changing our methods of working with provincial partners in protected areas for species like Saola (*Pseudoryx nghetinhensis*), towards a more collaborative management approach. This new approach after 4 months of operation is considerably more successful (in terms of amount of patrolling conducted and threats removed) than the previous approach (providing funding and technical support only).

#### Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

# Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

The project was designed in consultation with the relevant partners and experts (e.g. IUCN AsRSG, WWF AREAS, CTNP), which facilitated the speed with which we could implement the project once funding was received.

# Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

It was not possible to obtain meaningful data collected from any other activity (e.g. VCF funded monitoring trips/patrols) from Cat Tien National Park, hence we could not incorporate these data to our report, but the CEPF-funded survey and DNA analysis is all that will be required to confirm the accurate population status. CTNPs data collection, storage and analysis needs improvement to enable information sharing and furthermore, CTNP did not seem to want to share this information with us anyway. It was difficult enough as it was to obtain data for patrolling activities conducted by CTNP which were funded directly by WWF (data from the survey were managed by WWF staff, but patrolling data by CTNP), and submission of GPS tracks and datasheets was therefore a requirement of CTNP receiving funding for this activity. Full collaboration and transparency was therefore lacking between WWF and CTNP for the patrolling activities which we suspect was due to CTNP not believing that hunting was a significant threat to the rhino population and therefore perhaps viewing patrolling as a surplus activity to CTNPs own priorities. This was not the case for the survey however, with CTNP staff cooperating in full to ensure the survey was implemented successfully. In summary, the project really needs to be a high priority of the partner (in this case CTNP) to ensure activities are implemented properly, or alternative approaches found if traditional methods of working are not successful.

#### Other lessons learned relevant to conservation community:

The use of conservation detection dogs can greatly improve surveys for endangered, cryptic and little known species and we hope will be used more widely in future.

### **ADDITIONAL FUNDING**

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
WWF	A	\$71,393	
USFWS	A	\$27,350	

\*Additional funding should be reported using the following categories:

- A Project co-financing (Other donors contribute to the direct costs of this CEPF project)
- **B** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)
- **C** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

### Sustainability/Replicability

## Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

This project was not designed for long-term sustainability or replicability, but to confirm the population status of the Javan rhino in Vietnam so that appropriate management actions could be identified and subsequently implemented. The survey and hormonal analyses have been completed and the genetic analyses are currently ongoing. Final results of the population status are expected shortly and will be released to the Vietnamese government, partners and donors, national and international media by WWF International and GMP a few weeks later. Appropriate management options have been developed by WWF and will be recommended to the Vietnamese government when the results have been released.

This project piloted new methodologies for rhinos; namely of employing detection dogs to improve detection of faecal samples and genetic analyses of faecal samples to determine population status. These methods have been successful for this particular project and will form a part of a manual which is currently being developed by AsRSG members, to guide NGOs, national institutions and other stakeholders involved in Asian rhino conservation and management, in 'best-practice' survey and monitoring methodologies for rhino populations.

Summarize any unplanned sustainability or replicability achieved.

#### **Safeguard Policy Assessment**

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

No environmental and social safeguard activities were necessary under this project; the survey did not adversely affect the environment or indigenous peoples, except as regards to unsustainable, illegal and destructive hunting activities. The survey teams removed snares and destroyed hunting camps when they were encountered, which was on quite a frequent basis. We also employed more than 6 local community members as local guides and porters for the duration of the survey (6 months), thereby having a positive effect on a few individuals.

Performance Tracking Report Addendum													
CEPF Global Targets													
(Enter Grant Term)													
Provide a numerical amount and brief description of the results achieved by your grant. Please respond to only those questions that are relevant to your project.													
Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July 1, 2009 to June 30, 2010. (Attach annexes if necessary)									
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No			Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.									
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.									
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	No												
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	No												
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	No												

If you answered yes to question 5, please complete the following table.

Table 1. Socioeconomic Benefits to Target Communities																					
Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.																					
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Name of Community	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic people	Recent migrants	Urban communities	Communities falling below th poverty rate	Other	Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security du to the adoption of sustaina fishing, hunting, or agricultural practices	More secure access to wal resources	Improved tenure in land or o natural resource due to titlin, reduction of colonization, etc	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as educatio health, or credit	Improved use of traditional knowledge for environmen management	More participatory decision making due to strengthene civil society and governanc	Other
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If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit:																					

### **Additional Comments/Recommendations**

### Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

#### Please include your full contact details below:

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