CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	World Pheasant Association
Project Title:	Conservation of Green Peafowl at key sites in Vietnam
Date of Report:	18 April 2013
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CEPF Region: IndoBurma

Strategic Direction: Strategic Direction 1 and specifically Investment Priority 1.5: Conduct research on 12 species for which there is a need for greatly improved information on their status and distribution.

Grant Amount: USD20,000

Project Dates: 1 June 2011 - 28 February 2013

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

- King Mongkut's University of Technology, Thonburi (Thailand): co-operated on the design and conduct of fieldwork, and subsequent analyses;
- Institute of Tropical Biology, Ho Chi Minh City: co-operated on conduct of fieldwork and all liaison with park managers and other officials;
- Cat Tien National Park: participated in fieldwork and assisted with logistics; and
- Yok Don National Park: participated in fieldwork and assisted with logistics.

Conservation Impacts

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

Green Peafowl *Pavo muticus* is one of the 67 Priority Species identified in the CEPF Ecosystem Profile as Investment Priorities for CEPF in Indochina and as one of 12 species for which there is a need for greatly improved information on their status and distribution. The species was once a familiar sight in many areas of South East Asia from NE India and SW China south to Java in Indonesia. Over the last 100 years or so it has suffered from habitat loss and over-exploitation. Its large size appears to have made it especially sensitive to both pressures. Not only has it been widely hunted, seemingly for food and its plumage, but it seems to have specific ecological requirements that suggest viable populations may need extensive areas in order to ensure long-term survival. The species' susceptibility to hunting and the widespread alteration of habitat throughout South East Asia has now left the species with a localised distribution in many areas.

There have been surprisingly few detailed studies that provide any insights into its ecology or the threats it faces. Perhaps more crucially, there is no clear idea how to undertake objective monitoring of status. Given the presumed large areas over which populations may range, this is becoming increasingly important, if not critical, in order to monitor those populations that have long-term survival prospects. In other words, populations that are of a reasonable size (in terms of numbers) and occupy a sufficiently large tract of land need to be closely monitored now to ensure that population declines are identified early and potential causes determined.

This means that it is difficult to understand what impact conservation actions that are designed to mitigate threats to key populations are having. Therefore, this project seeks to develop a method for monitoring green peafowl reliably whilst at the same time providing information on the status of the species and its survival prospects in southern Vietnam. This population is of considerable interest because of the proximity of the substantial population in the eastern plains of Cambodia.

The only place in the world where a resurvey (and thus comparison of results with a previous survey) could be carried out is in Dak Lak province, Vietnam. This area was sample-surveyed by Brickle (2002) in 1998 and provides arguably the only quantitative information on the species at the landscape level. Whilst a population estimate was not made, this study provided a detailed assessment of habitat use and, based on this assessment, predicted the species' distribution across the whole province.

Our overall objective was to provide a coherent reassessment of the status of the green peafowl at two sites in a southern Vietnam landscape, with a view to determining survival prospects and identifying long-term conservation needs. Both Yok Don and Cat Tien National Parks are Important Bird Areas (IBAs) and the peafowl is a qualifying species in both cases. Both were highlighted in McGowan et al. (1998) as key sites in Vietnam for the species. Therefore a reassessment of status and prospects was badly needed.

- Brickle NW (2002) Habitat use, predicted distribution and conservation of Green Peafowl (*Pavo muticus*) in Dak Lak province, Vietnam. *Biol Conserv* 105:189–197.

- McGowan, P., Duckworth, W., Wen Xianji, van Balen, S., Yang Xiaojun, Mohd. Khan, Siti Hawa Yatim, Thanga, L., Setiawan, I., and Kaul, R. (1998). A review of the status of the Green Peafowl *Pavo muticus* and recommendations for future action. *Bird Conservation International* 8: 331-348.

Therefore, this project has contributed to the CEPF Ecosystem Profile by providing information on a priority species at key sites and through developing a monitoring methodology that can be used to track numbers at other key sites.

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

1. Identifying a suite of sites, including those outside protected areas, to be resurveyed

Given a variety of practical constraints (seasonality, time and logistics) and the need to develop a robust survey and monitoring protocol, we concentrated on the two main protected areas: Cat Tien and Yok Don National Parks. Surveys were carried out in both areas following scoping visits to determine exactly what was needed in order to conduct surveys that would produce statistically meaningful results. These scoping visits proved crucial in ensuring that the main field visits were of appropriate duration and had sufficient fieldworkers to both test the methodology and gather reliable results.

1. Provide a standardised survey method for monitoring the species

We have provided a standardised survey method and this was tested at Cat Tien in the 2012 field season. This worked well and gave us a defensible estimate of density. We then used this in the 2013 field season at Yok Don and it again gave a estimate of density. We believe these tests show that the sampling design and field protocol work and can be used elsewhere. Indeed they are being used already in Thailand..

2. Use same approach and methods to survey Cat Tien National Park & other sites that may be promising

This has been done and will be published along with the results. Please note the last field season finished just before the end of the project period and so the publication, with full analyses, is being prepared now.

3. Liaising with local stakeholders to determine whether the nature and extent of threats

All of this has been done and will feature in the publication. Briefly though, the situation at Cat Tien is very promising for green peafowl, whilst that at Yok Don there is considerable cause for concern because the density was lower than in 1998 seemingly because of hunting and potentially feral dogs. We had discussions with park staff about reducing hunting pressure, especially in areas where there is important habitat. This should be followed up.

4. Proposing outline conservation strategies

These will be presented in the publication specified above. More critically, this project has led to serious discussions about developing field research capacity and enhancing conservation practice, centred on Galliformes, in southern Vietnam. This would be centred on the Institute of Tropical Biology, where Nguyen Tran Vy is based. He took part in, and helped arrange all fieldwork. He is now registered for a PhD programme in the Conservation Ecology Programme at King Mongkut's University of Technology, Thonburi in Thailand and will be researching southern Vietnamese Galliformes. He has a strong international advisory committee to help broaden his education and will be working alongside a PhD student conducting research on green peafowl ecology and conservation at the regional level. All of this provides continuity for future conservation and monitoring efforts for this species.

Please provide the following information where relevant:

Hectares Protected: --
Species Conserved: --
Corridors Created: --

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

The overriding challenge to this project was getting a team into the field that could gather scientifically meaningful data that would underpin conservation assessments and management. This meant the gathering of sufficient data in a suitable design that would allow density estimates to be calculated, providing baselines for action and monitoring. The challenge arose because of the lack of adequately trained fieldworkers in Vietnam and because of the cost of getting into the field for a useful period of time. This was especially the case in Yok Don. We put together a team that has turned out to be a strong consortium, involving researchers from both King Mongkut's University of Technology, Thonburi and the Institute of Tropical Biology, to overcome these challenges. As a result of this project, these two organisations are collaborating formally to develop capacity for international standard vertebrate ecology fieldwork in southern Vietnam.

What this did mean was there no opportunity to spread fieldwork beyond the two National Parks. This was partly for financial reasons (necessary length of time to be spent in costly places), but also because of the limited time to make robust estimates of density given the seasonality of weather and behaviour in southern Vietnam. This compromise was considered acceptable as we have the first robust estimates of density of this species, have density estimates two key sites in Vietnam (if not the two main sites) and have a methodology that can be used elsewhere in the region. If we had sought broader coverage, fieldwork would have been too brief at each site, the population estimates would have remained of uncertain value and, therefore, provided no meaningful baseline for comparison, either between sites at the same time, or at the site over time.

The conduct of the fieldwork right at the start of 2013 has also led to a short delay in finalising the publication and outline strategies, but these will be completed shortly.

Were there any unexpected impacts (positive or negative)?
There were no unexpected impacts beyond those above, although the density estimate at Yok Don was a negative finding.

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.
Pilot visits are very helpful in informing survey design and in our case allowed us to be confident that we could produce defensible density estimates. The other issue relates to capacity and where this was lacking in southern Vietnam our colleagues from Thailand who work to international standards were able to initiate a long-term collaboration. Despite significant investment in Vietnam by the conservation community over the last 20 years, the lack of capacity to conduct fieldwork to international standards is a concern.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)
We were perhaps a little ambitious within the timeframe, given the seasonality of fieldwork in southern Vietnam. We completed all activities (except for the wider survey noted above), but the publication will be finished a couple of months after project closure.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)
None beyond those above.

Other lessons learned relevant to conservation community:
No, but it should be emphasized that the continuing lack of capacity in southern Vietnam is a real obstacle to biodiversity conservation. The Institute of Tropical Biology is an appropriate focus to develop such capacity, especially in partnership with institutions with established fieldwork capability and credibility.

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

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.

The survey methodology is repeatable and can be used both at the same sites in the future and at other sites. If the same sampling design and field protocol is used density estimates will be directly comparable and allow detection of population change (at the same site, between times) or the comparison of key populations (between sites, same time). This will also allow the impact of management practices to be assessed.

Summarize any unplanned sustainability or replicability achieved.

The lack of capacity in southern Vietnam has led to the emergence of a new relationship between King Mongkut's University of Technology, Thonburi and the Institute of Tropical Biology. This will provide long-term training to staff in the Institute and will also draw in a wider network of international field biologists. This will contribute to the sustainability of fieldwork in southern Vietnam and, given the Institute's relationship with protected area managers in the region, may lead to stronger collaborations designed to enhance protected area management.

Safeguard Policy Assessment

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

None were required.

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, 2012 to June 30, 2013. (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

Name of Community	Community Characteristics								Nature of Socioeconomic Benefit											
									Increased Income due to:											
	Small Landowners	Subsistence economy	Indigenous/ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below the poverty rate	Other	Adoption of sustainable natural resource management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, h…	More secure access to water resources	Improved tenure in land or other natural resources due to titling, reduction of…	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure source of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental manag…	More participatory decision making due to strengthened civil society…	Other

Total																					
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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