CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Newcastle University
Project Title:	A strategic approach to conserving the *Critically Endangered* Edwards's pheasant (*Lophura edwardsii*)
Date of Report:	30 November 2013
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CEPF Region: Indo-Burma

Strategic Direction: 1

Grant Amount: $20,000

Project Dates: May-October 2013

Implementation Partners for this Project (please explain the level of involvement for each partner): The workshop was organised under the umbrella of the IUCN SSC Galliformes Specialist Group and hosted by the IUCN-Vietnam office. It was funded by the Critical Ecosystem Partnership Fund through a grant to Newcastle University, UK. VietNature Conservation Centre assisted with workshop development and logistics.

Conservation Impacts

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

Edwards's pheasant was identified by CEPF as one of 67 globally threatened species that are in urgent need of action to identify and secure core populations from overexploitation and illegal trade. This species was uplisted from Endangered to Critically Endangered on the IUCN Red list in late 2011 reflecting increased concerns about its persistence in the wild. Surveys supported by CEPF in early 2011 failed to identify any remaining populations in Dakrong Nature Reserve (thought to be a potential stronghold of the species) and in Khe Nuoc Trong Watershed Protection Forest. These surveys also highlighted high levels of unsustainable habitat destruction and illegal hunting that is reducing vertebrate populations within the lowland forests of central Vietnam.

This has concentrated attention on identifying a suitable site for conservation management. Such a site would either contain a wild population or be prepared for potential reintroduction of captive birds. The project has brought together knowledge of the species and recent developments in predicting potentially suitable habitat to propose sites where the species may be found or where reintroduction may be feasible. This information was then discussed and analysed by a broad range of people with on-the ground knowledge of both conducting fieldwork in Central Vietnam and management and policy. This resulted in a conservation strategy for the species, with a clear statement of actions to be completed in the next two years. An Edwards's Pheasant Working Group will co-ordinate and oversee this Strategy.

The project has, therefore, provided a clear plan for identifying a site for one of CEPF's priority species, identified the management needs for such a site, and brought together individuals and organisations with the necessary expertise and roles to implement the strategy.

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

We stated that we would lead and co-ordinate the drawing together of both information and people to devise a strategic approach that will make the most of any future resources that can be deployed for this species or in this area. Information will be brought together by analysing geographic data to identify the areas where the most suitable habitat is likely to remain. We would do this by: 1)

assessing areas of potentially suitable Edwards's pheasant habitat using remote sensing data and any other available data; and 2) identifying those areas with the highest likelihood of Edwards's pheasant persistence. These would form the core priority sites of a survey strategy. People will be brought together through an IUCN SSC Species Conservation Strategy process.

Habitat. This required obtaining geospatial images from a range of sources, applying MAXENT to model the species' distribution based on our knowledge of its requirements. This has allowed for, where possible, the constraints on the interpretation that can be drawn from this analysis due to the time lag since many of the species' locations were collected and also the potential extent of habitat changes at an appropriate resolution

Strategy. We have developed a species conservation strategy for Edwards's pheasant following the Species Survival Commission (SSC) guidelines. This planning process brought together relevant experts for assess constraints and pressures and develop a strategy to overcome them. We discussed and learnt from the successful approach in co-ordination carried out by the Saola Working Group and as a result agreed the establishment of a Edwards's Pheasant Working Group.

Please provide the following information where relevant:

Hectares Protected: N/A
Species Conserved: N/A
Corridors Created: N/A

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

The project was successful in achieving its short-term objectives because it has brought together both knowledge and people into a single strategy with stakeholder support. Achieving longer-term objectives will depend on whether a viable wild population can be found and/or whether appropriate management of a potential reintroduction site and of captive birds can be achieved and harmonized.

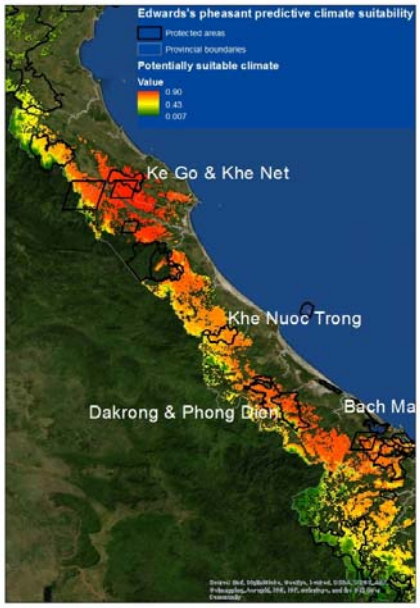
Historically, Edwards's pheasant was recorded in four central Vietnamese Provinces, Ha Tinh, Quang Binh, Quang Tri and Thua Thien Hue. In the 1920s Delacour collected several specimens but between 1930 and 1996, the species was not recorded and assumed extinct. After some unconfirmed records of Edwards's pheasant in Thua Thien Hue Province the species was rediscovered in 1996 near to the Phong My Commune, Thua Thien Hue, and also near the Huong Hiep Commune, Quang Tri. After this re-discovery several other individuals were found in Quang Tri and Thua Thien Hue Provinces. The last confirmed recent record was in 2000, where one male was confiscated from a hunter and held in captivity in the Hai Lang District Forest Protection Department, Quang Tri. In total there have been 85 individual Edwards's pheasant recorded and 66 of these have associated geographic location data. These 66 individual records consist of 26 independent geographic locations (several individuals, up to 10, were recorded at the same location at the same time). We developed a predictive species distribution model from these 26 independent records using altitude, mean wet season rainfall, mean wet season temperature and annual temperature range as environmental covariates. The model was then constrained by the extent of evergreen forest in Vietnam. The model showed that areas in Ha Tinh and Quang Binh had very high probability (>0.87) of being potentially suitable habitat (where suitable climate, elevation and evergreen forest coincide) for Edwards's pheasant. These included Ke Go and Khe Net Nature Reserves. Parts of Khe Nuoc Trong Watershed Protection Forest (Quang Binh), Dakrong Nature Reserve (Quang Tri), Phong Dein (Thua Thien-Hue) Nature Reserve and Bach Ma National Park (and extension; Thua Thien-Hue) had high probability (>0.77) of being potentially suitable.

Several of the protected areas established in the 1990s in Central Vietnam were created because of Edwards's pheasant and as a result of BirdLife International studies and feasibility assessments. These include Dakrong and Phong Dien Reserves. There is a captive population of Edwards's pheasant in Vietnam, Europe, North America and Japan. The international studbook for this species has a new keeper and the captive population is currently being examined for genetic variability and purity, as some individuals were hybridised with the Taiwanese Swinhoe's pheasant *Lophura swinhoii* and their progeny have bred.

Were there any unexpected impacts (positive or negative)?
No

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.
A key challenge is finding suitable places on the ground for conservation action for this species. Such a place could be either: a) a site where the species is found during surveys; or b) a site where reintroduction could take place. There was discussion about potential areas for survey, which involved assessing predictions from climate data; examination of vegetation cover maps; and on-the-ground knowledge from the field. Areas on a map were identified as candidate sites for survey and these will be further examined as discussed as part of a survey strategy. It was agreed that it is likely that Edwards's pheasant has a requirement for tracts of wet evergreen forest within evergreen forest and so finding patches of this forest type will be the first step. It will then be necessary to find suitable terrain, which is considered to be valley bottoms at low altitudes and with gentle slopes. As two other species from the same genus also occur in the evergreen forests, there was discussion as to whether all three might live in the same forest and be separated by habitat and or altitude. A presentation was given on one of these species, Siamese fireback, from Sakaerat Environmental Research Station in Thailand outlining both the study methods and results. Participants felt that there were subtleties of habitat use of these three species and consolidating current knowledge and opinion together would help understand whether there have been changes to the apparently specialised habitat requirements of Edwards's pheasant that may affect its survival prospects.



A predictive species distribution model for Edwards's pheasant constrained by the extent of evergreen forest remaining in Vietnam. The probability of habitat suitability for Edwards's pheasant increases from green (low probability) to red (high probability).

Although the Vision, Goals and Objectives were set with a longer time frame in mind, most the Actions were given a much shorter timescale. This is because time is running out for this species and its habitat and if intervention (i.e. reintroduction) is to be needed, then it was felt that suitable sites should be identified and prepared as soon as possible. Within the next two years, therefore, potential sites should be surveyed for the species, all available information on surveys (camera-traps and others) should be gathered and analysed, and a study should be conducted into the feasibility of reintroduction. At the same time there should be work to identify and, where possible, prepare sites for management work if the species is found, but also to lay the

groundwork for reintroduction, if that proves necessary. As subsequent actions will depend on whether or not a wild population is found and what is needed to secure suitable management at a site for the species, it was considered unrealistic to identify actions beyond this initial phase. Given the rapidly dwindling prospects for this species it was concluded that the survey and site preparation should be completed as a matter of urgency, and well within two years, if at all possible.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)
The process was informed and open to all with direct experience in the provinces where the species has been reported and where it may yet turn up. It was, therefore, successful in both attracting relevant people and bringing together field knowledge. The process was informed by pre-existing contact with a wide range of individuals and organisations that had experience of conducting surveys and promoting conservation in the provinces that comprise the species historic and potential distribution. This network added additional contacts to ensure its completeness. It was open as all information provided was treated equally and the final list of candidate sites drew on all sources (all known localities, knowledge of experienced surveyors and fieldworkers, and those working in protected area and other conservation management).

An open discussion at the end of the meeting was unanimous in agreeing that an Edwards's Pheasant Working Group should be established and how it should be co-ordinated.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)
There were no shortcomings in the project execution. The challenges that the project faced were due to the shortage of information and the lack of a real focus for the species – either one or more confirmed sites or significant confidence that existing protected areas hold the species. The workshop did, however, work to provide this focus by the end of the project.

Other lessons learned relevant to conservation community:
Strategic planning can provide a focus for tricky issues that need a new approach or where actions have become quite fragmented and piecemeal. The key now will be turning the strategy into action and for this, we must secure funding for the Working Group.

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.
We made very good progress in shaping future sustainability: we have an agreed way forward and a diverse Working Group of individuals and organisations capable of delivering this way forward, with support from other interested parties as needed. We are now working to secure the funds for this consortium.

Summarize any unplanned sustainability or replicability achieved.
There was a very strong consensus as to the structure of the Working Group and this should provide a strong impetus once it is established.

Safeguard Policy Assessment

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

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, 2013 to June 30, 2014. (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 o…	Other

Total																					
If you marked “Other”, please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit:																					

Additional Comments/Recommendations

None

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.

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