

CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Wildlife Conservation Society
Project Title:	Assessing the taxonomic validity of Lowe's otter civet
Date of Report:	December 5 th 2011
Report Author and Contact Information	Scott Robertson WCS Vietnam Program 1302, 57 Lang Ha, Hanoi Tel: +844 35149750; +84 904114712 sroberton@wcs.org

CEPF Region: Indochina (Indo-Burma)

Strategic Direction: Safeguard priority globally threatened species in Indochina by mitigating major threats

Grant Amount: \$5,040

Project Dates: 1st September 2009 – 28th February 2011

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

Daphne Hills and Louise Tomsett of the Mammal Department, British Museum of Natural History, London, England have assisted the development of this project and will provide access to specimens and support during visits to the museum. Lim Kok Peng Kelvin from the Raffles Museum of Biodiversity Research, National University of Singapore also provided access to specimens and samples. Initial microscopic hair analysis was carried out by Dr Rachael Kuhn of the French Mammal Society yet due her changing institutions she was unable to continue and we started working with Silvana Tridico of the Australian Federal Police, Forensic and Data Centres, Canberra, Australia. Dr Bettine van Vuuren, of the Department of Botany & Zoology, Stellenbosch University, South Africa carried out the initial DNA extraction and collaborated with Dr Andrew Bowkett, Field Conservation & Research Dept, Whitley Wildlife Conservation Trust and the Molecular Ecology & Evolution Group, University of Exeter, to carry out the DNA sequencing in their laboratory. However, we failed to extract suitable DNA material and therefore enlisted to assistance of Dr Thomas Gilbert Centre for GeoGenetics, Natural History Museum of Denmark and Department of Biology, University of Copenhagen, Denmark who has significant experience in ancient DNA and was successful in extracting and sequencing a sample for analysis

Conservation Impacts

This project has provided a critical validation of a CEPF priority species that was listed in the ecosystem profile as requiring greatly improved information on status and distribution. The analysis funded through this grant proved that Lowe's Otter Civet is not a valid taxon and therefore should not be listed as a CEPF priority species. We carried three analytical methods: DNA, museum specimen comparison and microscopic hair analysis, comparing the Lowe's Otter Civet specimen to specimens of Otter, Civet and Otter-civet. Our results conclusively show that the Lowe's Otter Civet specimen is in fact a juvenile Eurasian Otter. This will guide future and present decision-making for funding and conservation planning and strategies.

We have not yet submitted the results to a peer-reviewed journal but expect to finalize our draft paper in the coming weeks for submission in the New Year. We have maintained close contact with the IUCN/SSC Small Carnivore specialist group Chair, IUCN Red List focal point and the CEPF RIT on this study throughout so the results can be factored into their work immediately and not postponed through awaiting publication. Equally, we have liaised with Vietnamese authorities revising species protection legislation to remove this species.

Lessons Learned

A major challenge faced during implementation of this project was coordinating the study across the various stakeholders who were each doing this analysis in their free time, were all on different time zones and each faced their own personal crises throughout the duration of the project. Administrative procedures for taking samples from museum specimens and exporting were also extremely time-consuming. The project would have benefited from a funded-dedicated researcher pushing forward and coordinating all aspects but this is likely unrealistic for such a discrete, small funded study. We would recommend though future projects of a similar design consider the PI's other responsibilities and available time in planning and ensure time can be allocated to such work.

DNA analysis and morphological comparison studies are commonplace in taxonomic studies but here we have successfully demonstrated that microscopic analysis of hairs is also a valuable technique for species identification and taxonomic studies.

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
WCS	A	\$3000	1 month S. Robertson, PI
Newquay Zoo	A	\$3000	1 month Dr A. Bowkett for DNA analysis
French mammal Society	A	\$3000	1 month Dr Rachael Kuhn, Hair analysis

Sustainability/Replicability

The sustainability of this project will be achieved through the publication of the study in a peer-reviewed journal and a short note in the IUCN/SSC Small Carnivore Specialist Group Journal. This has not been achieved yet as we are still finalizing the draft manuscript due to the above mentioned challenge of coordinating with various stakeholders across the world.

Safeguard Policy Assessment

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, 2010 to June 30, 2011. (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 1 below.	NO			

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

Additional Comments/Recommendations

Update: the paper summarizing the results of this project was published in 2017:

Roberton, S. I., Gilbert, M. T. P., Campo, P. F., Salleh, F. M., Tridico, S. and Hills, D. (2017)
Lowe's Otter Civet *Cynogale lowei* does not exist. *Small Carnivore Conservation* 55: 42–58

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.ceph.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

Name: Scott Roberton
Organization name: Wildlife Conservation Society
Mailing address: PO BOX 179, Hanoi GPO, Vietnam
Tel: +844-3514-9750
Fax:
E-mail: sroberton@wcs.org