

## The Rufford Foundation

### Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Truong Quang Nguyen
<b>Project title</b>	The world's most beautiful geckos facing extinction: Population assessment of <i>Cnemaspis psychedelica</i> in southern Vietnam and conservation measures.
<b>RSG reference</b>	18631-2
<b>Reporting period</b>	November 2015 to November 2016
<b>Amount of grant</b>	£5,000
<b>Your email address</b>	nqt2@yahoo.com
<b>Date of this report</b>	22 November 2016

**1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

Objective	Not achieved	Partially achieved	Fully achieved	Comments
To identify the distribution pattern of <i>Cnemaspis psychedelica</i> on Hon Khoai Island			Yes	We recorded the occurrence of this species at six sites on Hon Khoai Island. In addition, <i>C. psychedelica</i> was recorded for the first time from Hon Tuong, a small offshore isle close by Hon Khoai Island
To estimate the density, population size and population structure of the species			Yes	A total of 267 animals were captured during the wet season 196 were adults - 526 individuals (378 adults) were observed during the dry season. Based on four investigated sites, population size estimates revealed about 365 animals during the wet season. With respect to the same transects we found a total of 576 estimated individuals in the dry season. Including two further sites (viz. six sites in the total) a total population size of 732 individuals was recorded during the dry season on Hon Khoai Island. The effective population size (considering only mature individuals) was estimated approximately 507 animals during the dry season. With regard to seasonal variations, the mean density of <i>C. psychedelica</i> along suitable habitat sites was estimated to be around 120 individuals per transect km during the wet and 192 individuals per transect km during the dry season
To investigate the ecological niche, including habitat use and home range,			Yes	The species is a microhabitat specialist preferring large, granite boulders in the shade of the forest canopy. On Hon Khoai Island, small to large boulder outcrops

occupied by the species				<p>provide this microhabitat type, which are surrounded by dense vegetation mainly consisting of small trees, with a leaf-covered forest floor. Individuals retreat into cracks in the rocks, between rocks or beneath ledges when threatened. Geckos usually bask in filtered sunlight during the daytime. At night most <i>C. psychedelica</i> were found below overhanging granite boulders, sleeping on leaves or deeply retreated into crevices. We observed gravid females carrying two eggs. Egg are deposited on the undersides of overhanging boulders, sometimes in aggregations.</p>
To evaluate threats to the population of the species			Yes	<p>The illegal collection for the commercial trade is a major threat to the species because it has a low capacity to recover from over harvesting due to the small estimated population size and a low reproductive rate. The introduction of the long-tailed macaques (<i>Macaca fascicularis</i>) to Hon Khoai island poses another threat to <i>C. psychedelica</i> as macaques were observed to feed on geckos and their eggs. In addition, road construction caused habitat destruction and landscape fragmentation on Hon Khoai Island. The density of the species was lower at the disturbed sites compared to the density in undisturbed forest. The current habitat destruction in concert with the planned development of sites for ecotourism will prospectively interfere with the natural occurrence of <i>C. psychedelica</i>, which was found to flee hastily in response to the presence of humans.</p>
To carry out initial conservation			Yes	<p>Since the species already gained high international demand rising the pressure on</p>

<p>measures and awareness activities</p>			<p>wild populations, the proposal for listing of <i>Cnemaspis psychedelica</i> in the Appendix I of CITES was approved in the COP meeting in South Africa. The species was listed in the IUCN Red List as Endangered and was recently proposed as a protected species in the governmental decree of Vietnam.</p> <p>The forest on Hon Khoai is currently under the management of the Hon Khoai Forest Ranger Station. However, establishment of a species conservation area on Hon Khoai Island will be important to facilitate long-term habitat and species protection. We are now working with provincial authorities of Ca Mau Province and cooperation partners to promote this process, including doing further baseline research and preparing an investment plan for the new protected area.</p> <p>A conservation breeding programme for <i>C. psychedelica</i> in southern Vietnam is running by the Institute of Ecology &amp; Biological Resources, Wildlife at Risk and Cologne Zoo. First egg depositions already took place in the breeding facility and first successful reproduction in captivity was recently reported by our working team.</p> <p>To raise awareness, a campaign was recently initiated by our team and signboards pointing to the conservation needs of <i>C. psychedelica</i> were handed over to the respective provincial authorities to be placed on Hon Khoai Island. Local rangers were provided with camera and GPS devices, and funds were provided to install big waste buckets along the forest paths to reduce the pollution on the island.</p>
--	--	--	--

**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

We assume that *C. psychedelica* probably occurs on further similar small isles in the Rach Gia Archipelago (e.g., Hon Sao, Hon Doi Moi, Hon Da Le). However, we could not do a field survey on Hon Sao because this isle has been leased by a private company.

**3. Briefly describe the three most important outcomes of your project.**

- 1) Discovery of a new distribution site of *C. psychedelica* on Hon Tuong Isle.
- 2) Providing important data (population status, ecological characteristics, and threats) for listing this species in the IUCN Red List, CITES Appendix I and the governmental decree of Vietnam.
- 3) Carrying a series of conservation measures and awareness activities in order to protect the habitat and population of the species on Hon Khoai Island.

**4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).**

Local rangers were provided with camera and GPS devices, and funds were provided to install big waste buckets along the forest paths to reduce the waste on the island.

Signboards pointing to the conservation needs of *C. psychedelica* were also placed on Hon Khoai Island.

**5. Are there any plans to continue this work?**

Establishment of a species conservation area on Hon Khoai Island will be very important to facilitate long-term habitat and species protection. We are now working with provincial authorities of Ca Mau Province and cooperation partners (Wildlife at Risk, Cologne Zoo, Rain Forest Trust) to promote this process, including doing further baseline research and preparing an investment plan for the new protected area.

**6. How do you plan to share the results of your work with others?**

Our data were shared with provincial authorities of Ca Mau Province (Forest Protection Department, Department of Agriculture and Rural Development, People’s Committee), governmental agencies (CITES Management Authority of Vietnam, Department of Biodiversity Conservation, Ministry of Nature Resources and Environment), NGOs (IUCN, Wildlife at Risk, WWF), and all other parties of CITES at the conference in South Africa in October 2016.

**7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?**

Two field surveys were conducted during the wet season in November 2015 as well as during the beginning of the dry season in January 2016 on Hon Khoai Island, Ca Mau Province. Time schedule was fit with our proposed plan.

**8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.**

Item	Budgeted Amount	Actual Amount	Difference	Comments
Travel cost	1060	1060	0	
Boat rental: Ca Mau - Hon Khoai Island	1000	1060	-60	The cost for boat rental was a bit higher
Perdiem: one staff from Cau Mau FPD and 3 local guides	810	810	0	
Meals and Accommodation	1560	1560	0	
Field supplies	570	620	-50	We spent more fund for batteries
<b>TOTAL</b>	<b>5000</b>	<b>5110</b>	<b>-110</b>	

**9. Looking ahead, what do you feel are the important next steps?**

- 1) Establishment of a species conservation area on Hon Khoai Island will be very important to facilitate long-term habitat and species protection.
- 2) Removal of the Long-tailed Macaques (*Macaca fascicularis*) from Hon Khoai Island.
- 3) Listing *C. psychedelica* in the governmental decree (in cooperation with Ministry of Nature Resources and Environment).

**10. Did you use the RSGF logo in any materials produced in relation to this project?  
Did the RSGF receive any publicity during the course of your work?**

We used the RSGF logo on the signboard (see attachment).

I used the RSGF logo in my talks at the Phu Yen University (October 2016) and at the Institute of Ecology and Biological Resources in Hanoi (August 2016).

I will use the RSGF logo in my oral presentations in the 3rd National Conference on Herpetology in Vietnam, held in Hanoi, 26 November 2016.

**11. Any other comments?**

We thank the Rufford Small Grants Foundation for support of our biodiversity research and conservation in Vietnam.