

The Rufford Foundation Final Report

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

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. 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. Please note that the information may be edited for clarity. 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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Yap Jo Leen
Project title	Activity Patterns, Habitat Use and Diet of Dusky Leaf Monkeys (<i>Tracypithecus obscurus</i>) in Penang, Malaysia
RSG reference	RSG 19087-1
Reporting period	4 February 2016 – 4 February 2017
Amount of grant	5,000
Your email address	camelwhite0918@gmail.com
Date of this report	15 February 2017

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
<p>To gain a better understanding in how primates cope with anthropogenically-influenced habitats in order to work towards a conservation plan for this species at Penang Island.</p>				<p>Three study sites: Teluk Bahang, Penang Botanical Gardens and Penang Hill. Teluk Bahang is our focal study group that covers three different environments (forested area, human-influenced area and coastal region). It took us 5 months to habituate our focal group in Teluk Bahang. However, we now have sufficient data to compare two out of three study sites: Teluk Bahang and Penang Botanical Gardens. We are now starting the sampling process at Penang Hill.</p> <p>First publication "Activity Pattern, Habitat Use and Diet of a group of Dusky Leaf Monkeys (<i>Trachypithecus obscurus</i>) in Penang, Malaysia" is now being prepared based on the Teluk Bahang study site.</p>
<p>To serve as an important platform in Penang to educate residents about wildlife at the island and protect its natural resources for human well-being, education and eco-tourism.</p>				<p><u>Main event for this objective:</u> 10th September 2016 - Penang LaoGao, Monkeys! Primate awareness workshop for local residents. https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1803065156647359</p> <p><u>Others:</u> 9th-10th July 2016- Batik The Monkey! (Nature Art project) In collaboration with Tropical Spice Garden https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1774063789547496 15th October 2016- Keynote speaker for 9th International Student Based</p>

			<p>Conference: Challenge of Change https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1820613058225902</p> <p>10th November 2016- Guest Lecturer for America University Program (AUP) students in INTI International College Penang https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1835878613366013</p> <p>January 2017- Guest Lecturer for Universiti Sains Malaysia (USM) Biology undergraduate students. https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1835878613366013</p>
To provide useful data that translates to other vulnerable and endangered local wildlife and plant species and help to raise awareness on a larger scale.			<p>Recently, we were involved in an environmental impact assessment to evaluate a proposed paired-road project that will run near our main study site (from Tanjung Bungah to Teluk Bahang, Penang).</p> <p>I have been sharing my findings and observations on social media and in environmental forum. The data is important to highlight the beauty of forested areas in Penang and the richness of biodiversity in the habitat.</p>
To establish a platform for primate research, conservation and nature education in Penang.			<p>I founded Langur Project Penang (LPP) as a research/ outreach programme under the umbrella of Universiti Sains Malaysia (USM) and the NGO Malaysian Primatological Society (MPS). LPP is now recognised by the Wildlife Department as the contact body for primate conservation in Penang. Besides, LPP has been organising various educational events with the support of other NGOs and private bodies, gained reputation</p>

				by featured on local newspaper for conservation efforts.
				I am planning to further my PhD research study on langurs in Peninsular Malaysia to support LPP as a platform for research, nature education and conservation. In fact, due to the excellent study progress I was invited by my supervisors to apply for a conversion of this current Master project into a PhD project.

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

One of the unforeseen difficulties that I faced during the beginning of this project is the habituation of the study groups. It takes a longer time than I expected to fully habituate the study groups in order to undertake non-invasive sampling (i.e., behaviour not influenced by the observer) and to be able to follow the groups continuously for long hours. It took 5 months of intensive fieldwork to habituate, name and identify each individual in my focal group. Thus, a longer period of time is required for me to lead the research in three or more study sites.

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

1. Research. We successfully habituated one group of wild langurs in the Teluk Bahang Forest, Penang. We are still conducting intensive sampling on that particular group to obtain more data to cover the social behaviour and life history of the langurs, instead of just looking into the activity patterns, habitat use and diet. For the second study site, Penang Botanical Gardens, we have identified six groups of langurs there that spend a lot of time foraging in the gardens. We are currently monitoring three out of the six groups of langurs and found interesting differences between the group in Teluk Bahang and the groups in Penang Botanical Gardens. From our data, we are able to get the presence/ absence data of other species of wildlife too, for example the vulnerable status black giant squirrels and Sunda colugo. We are also observing the relationship of langurs and racket-tailed drongo, where we believe there is a mutualistic relationship between these two species. From these other observations on additional fauna and flora in the langurs' home range, we are able to highlight the uniqueness and importance of Penang forested area as an importance food chain and ecosystem.

2. Nature Education. I fulfilled the education part by executing the first public primate awareness workshop in Penang in September 2016 which was well-received with plenty of positive feedback. Since then, I have been receiving invitations as an environmental-based guest speaker at learning institutions and held educational roadshows at several events alongside collaborating with various NGOs, governmental and private bodies for nature educational events for the local community. I am now ready to expand the nature education network to eco-tourism, with the help of other supporting partners that allow us to organise nature walks in different eco-tourism destinations in Penang in order to introduce langurs to the people and to highlight the importance of conserving forest for the wildlife, plants, economic prospect and future generation.
3. Conservation. On top of education to promote awareness and primate conservation, I had to handle langurs that were illegally kept as pets and langur road kill issue. Since I started the Langur Project Penang (LPP) Facebook page and have been constantly sharing our work, local residents started to contact us for any related primate-related issues. Then I would pass on this information to the Department of Wildlife and National Park (DWNP) for further action. Furthermore, we assisted DWNP to carry out immediate action on a case of handling a road kill langur and passed the body to DWNP to preserve it as specimen in the DWNP Lanchang Biodiversity Centre. Lastly, I joined a group of local experts to take part in an Environmental Impact Assessment to propose mitigation plans to the Penang State Government for a proposed paired road project near our Teluk Bahang study site.

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

We have been recruiting local volunteers as field and education assistants for this project. As field assistants, I have three Penang-based assistants of different backgrounds (graphic designer, vet student and business diploma student). I trained them the proper protocol of langur behavioural sampling methods, and since then they have been assisting me in sampling. They are now stepping out as outreach officers of LPP as part of the nature education. During our "Penang LaoGao, Monkeys!" workshop, I recruited local artists, photographers and videographers to help produce different artworks to highlight the importance of langurs and LPP. The works can be viewed in this video: <https://www.facebook.com/LangurProjectPenang/videos/vl.201689496908363/1812243515729523/?type=1>

More LPP videos can be viewed in our video page:

https://www.facebook.com/pg/LangurProjectPenang/videos/?ref=page_internal

Besides, I have been collaborating with local governmental and non-governmental bodies for projects and activities. For example, the Tropical Spice Garden (TSG) and Friends of Penang Botanical Gardens (FOPBG). TSG and LPP had collaborated for an art event (https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1774063789547496) and set up a series of langur educational signage (https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1871278933159314), while FOPBG are providing us assistance in plants identification and upcoming collaboration in organizing workshops. My aim is to encourage local eco-tourism bodies to engage in conservation support. LPP is now working on plans with other organizations such as The Habitat Penang Hill and Nature Classroom for exhibitions and nature rainforest trips.

5. Are there any plans to continue this work?

Yes, the long term aim for Langur Project Penang (LPP) is to establish this project as a NGO. For now, and until I have finished my Master/ PhD study it is under the umbrella of USM and the Malaysian Primatological Society (MPS).

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

I have been sharing project updates on the LPP Facebook page (<https://www.facebook.com/LangurProjectPenang/>) with now 833 likes (15th February 2017). Most people expressed strong interest towards this primate species and would love to understand more about it. I hope that through direct interaction with the public during public workshops, roadshows and exhibitions I will attract even more people to this iconic species.

For the future we will utilise even more creative interpretation methods to educate individuals of different ages, for instance, storytelling, games and interactive Q&A time.

My supervisor and I is currently working on a manuscript on the activity patterns, habitat use and diet of a group of dusky leaf monkeys in Teluk Bahang, Penang. This manuscript is expected to be finished in February 2017 and will be submitted to an international scientific primate's journal.

7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?

4th February 2016 to 4th February 2017.

The grant was fully utilised by early February 2017. We fulfilled most of the objectives of this project with the help of the First Rufford Small Grant. However, this project (Langur Project Penang, LPP) is still carrying on and planning to expand the research and outreach aspects.

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
2 x Garmin GPS MAP 62S	500	530	+30	I purchased Garmin 2x GPS 64S instead.
2 x handheld tablet computer with Windows 8 for data collection	575	290	-285	I purchased 1 iPad mini and the Animal Behaviour Pro app, which is IOS support only. This app is used for data sampling and the iPad mini is used for workshops too.
2 x binoculars, Bushnell	320	350	+30	I purchased 3 Bushnell binoculars for 3 field assistants. I had my binoculars since 4 years ago.
Transportation for field assistants (covering 3 study sites, up to 12 months)	1100	1390	+290	
Meals for field assistants during sampling (up to 12 months)	1500	800	-700	
Accommodation for field assistants during sampling (up to 12 months)	1000	444	-556	So far we have been recruiting mainly local Malaysian as project/field assistants, thus a small cost needed to cover the rental of homestay for volunteers from different states of Malaysia. A few out stationed and international

				volunteers joining us soon in year 2017.
Workshop and event materials	240	1000	+760	Workshop materials include: <ol style="list-style-type: none"> 1. Pamphlet printing 2. Exhibition posters 3. Venue hire 4. Educational booklets 5. Project merchandise
Additional expenses:				
Primate conservation efforts		100		I have been handling 3 langur road kill and injury incidents in year 2016, expenses include: <ol style="list-style-type: none"> 1. Veterinary consultation and medication 2. Transportation to incident sites
First Aid Kit		30		FA kit for sampling
Machetes		50		3 machetes for 2 field assistants and myself
Rubber shoes x4		11		Best and affordable footwear for tropical rainforest fieldwork
Total		4995		

* **Notes to Budget:** 1 Malaysian Ringgit (RM) equals 0.18 British Pounds.

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

The important steps for Langur Project Penang (LPP) can be discussed in three aspects:

1. Research. Expand the research to more study sites, and getting more local students and volunteers involved in road ecology, primate census and interview surveys in Penang.
2. Nature Education. Provide more environmental education to local residents and also create more educational materials for individuals of all ages. Continue to collaborate with more NGOs and learning institutions for more engaging workshops.

3. Conservation. LPP hopes to play a vital role in Penang as the main contact for any human-primate conflict and roadkill issues, which LPP directly reporting to DWNP (Department of Wildlife and National Park).

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

Yes, I am using The Rufford Foundation logo in the below materials:

1. Social media. LPP Facebook page is active with project updates. Rufford Foundation logo is featured as part of our cover photo:
<https://www.facebook.com/LangurProjectPenang/>
2. Pamphlets. I printed the educational A5 size- 8 page pamphlets that highlighted on these following facts: a) Facts about dusky leaf monkeys, b) Importance of primates, c) Why we should not feed the monkeys. The Rufford Foundation logo is featured as funding agency in the acknowledgments.



3. Front & back page

LANGUR PROJECT PENANG

Langur Project Penang (LPP) is a research project on the ecology and behaviour of Dusky Leaf Monkeys/Langurs (*Trachypithecus obscurus*) in Penang, Malaysia.

LPP is an outreach project of the Malaysian Primatological Society (MPS) in Penang. It serves as a platform for environmental research and education to local students and the community. LPP collaborates with governmental bodies, educational institutions and NGOs in Malaysia.

The outcome of the research will help us in gaining more understanding towards the relationship of these primates with the anthropogenic environment alongside their natural rainforest habitat. This knowledge can be used to effectively work towards a "Langur Conservation Plan", which takes into account of primate ecology, anthropogenic influences, and the use of scientific research and ecotourism to create an awareness for primate conservation and nature education.

SUPPORTED BY



4.

Page 2 & 7

" WHY PROTECT PRIMATES "

- We play a key role in ecology as seed dispersers
- We are important for forest regeneration
- We are part of the natural heritage in many countries and provide benefits to local communities
- We are of immense biological interest and importance

" WHY WE SHOULD NOT FEED THE MONKEYS "

- Human food is unhealthy for us and can lead to severe illness
- Feeding can make us aggressive towards humans as we become dependent on your food
- Our migration to human-populated areas due to food increases the risk of attacks and road accidents
- Our natural habits and survival abilities are interfered with and diminished
- Habituation to human presence facilitates poaching, illegal wildlife trade, diseases and parasite

Unfortunately, deforestation due to rapid development in Penang has caused tremendous habitat loss for this beautiful species of primate and other wildlife as well

Due to the high demand for exotic pets, the illegal poaching and wildlife trade for langurs and other primate species is very concerning

Furthermore, langurs can now be seen roaming around residential areas, causing more human-primate conflict

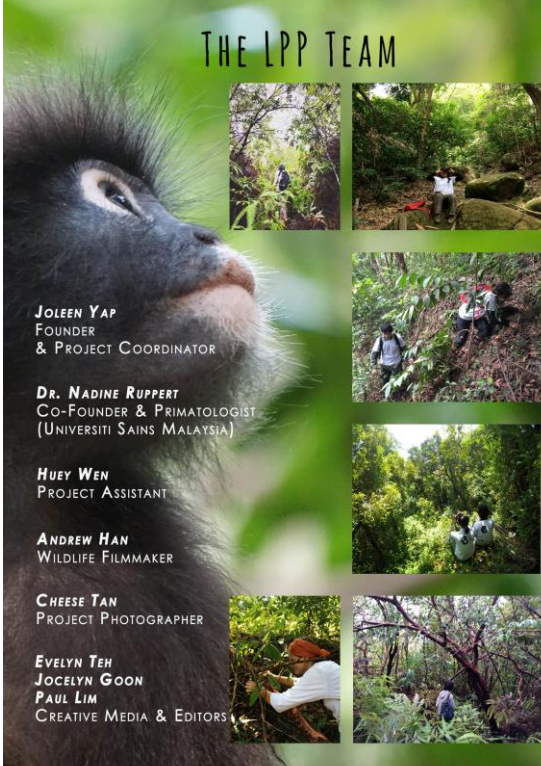
There are many ways of what we can do to educate the people around us about the importance of primates and why we should protect them. not just our words, but actions can make a change!



" Change happens by listening and then starting a dialogue with the people you don't believe is right. "
- Dr. Jane Goodall



5.



Page 4 & 5

THE LPP TEAM



JOLEEN YAP
FOUNDER
& PROJECT COORDINATOR

DR. NADINE RUPPERT
CO-FOUNDER & PRIMATOLOGIST
(UNIVERSITI SAINS MALAYSIA)

HUEY WEN
PROJECT ASSISTANT

ANDREW HAN
WILDLIFE FILMMAKER

CHEESE TAN
PROJECT PHOTOGRAPHER

**EVELYN TEH
JOCELYN GOON
PAUL LIM**
CREATIVE MEDIA & EDITORS

DUSKY LEAF MONKEYS

We are the Dusky Leaf Monkeys (*Trachypithecus obscurus*), or commonly known as Langur, Lotong or Spectacled langur. We can be found from Southern Burma to Peninsular Malaysia.

We are arboreal primates (live in trees), mostly folivorous (eat leaves) and also feed on fruits, flowers and young shoots.

Since we live in trees, we have great eyesight & quadrupedal movement control, so that we can move from tree to tree easily!

Did you know that our newborns are bright orange in colour?

Our groups can range up to 20 individuals. We are a gentle, loving and caring family.

In Penang, not many people know about us. Maybe it's because we are shy and live high up in the forest. Most people think that we live only in the Penang Botanical Gardens and Penang Hill, when we are actually living all around you!

The hilly forest in Penang are our home!

6.

Page 6 & 3

7. Exhibition posters. I have printed four size A1 posters for the 10 September, "Penang LaoGao, Monkeys!" Workshop's used, and still are utilizing the posters for upcoming workshops and talks. The "Introduction of Langur Project Penang" contains the Rufford Foundation logo.

INTRODUCTION OF LANGUR PROJECT PENANG



WHAT IS LANGUR PROJECT PENANG (LPP)?

LPP is a research project on the ecology and behaviour of Dusky Leaf Monkeys (*Trachypithecus obscurus*) in Penang, Malaysia. For this project, LPP is investigating the activity patterns, habitat use and diet of langurs in undisturbed areas and anthropogenic environment in Penang.

WHAT ARE WE TRYING TO ACHIEVE?

To become an established NGO that offers a research platform and environmental education focusing on primates- but not exclusively- to local residents and students by collaborating with governmental bodies, educational institutions and NGOs in Malaysia

The outcome of the research will help us gain an understanding towards the relationship of these primates with anthropogenic environment alongside natural rainforest habitat. This knowledge can be used to effectively work towards a "Langur Conservation Plan", which takes into account of primate ecology, anthropogenic influences, and the use of scientific research and ecotourism to create an awareness for primate conservation and nature education.






THIS PROJECT IS ENDORSED AND SUPPORTED BY:





FUNDED BY:






8. Primate educational signage. Two pieces of signage regarding interesting facts of dusky leaf monkeys had been installed in Tropical Spice Garden as educational tools. Rufford Foundation logo is featured as funding agency in the acknowledgments.

https://www.facebook.com/1667304236890119/photos/?tab=album&album_id=1871278933159314

11. Any other comments?

It is a blessing for LPP to progress well between the periods of February 2016 to February 2017. We managed to form a team of locals from different backgrounds and skills. So far for the year 2016, we successfully organised several events as shown in objectives.

I am planning to progress LPP as a registered NGO in Penang later with the objectives on wildlife research, conservation, and environmental education. This community based NGO will be still being maintaining the name "Langur Project Penang", based in Penang, and will focus on environmental and wildlife conservation (specialized in primates) and collaborate with other NGOs for future projects.

I have some additional planning for my further research to support LPP as a holistic educational research platform, and hope to attract more students and local residents to join me for this effort.

I very much appreciate the Rufford 1st small grant as the grant helped me launch this project and achieve a lot in a short period of time.

Thank you very much.