

## The Rufford Small Grants 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>	Bhargavi Srinivasulu
<b>Project title</b>	Creating awareness and stakeholder sensitization for conserving endangered endemic Hipposiderid bats in Kolar district, Karnataka, India
<b>RSG reference</b>	16916-1
<b>Reporting period</b>	January 2015 – April 2016
<b>Amount of grant</b>	5000 GBP
<b>Your email address</b>	<a href="mailto:bharisrini@gmail.com">bharisrini@gmail.com</a>
<b>Date of this report</b>	29 April 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
Field surveys and acoustic monitoring			Yes	Detailed analysis on the echolocation calls of <i>Hipposideros hupophyllus</i> and <i>Hipposideros durgadasi</i> are being carried out and the results would be published in a peer-reviewed international journal with due acknowledgements to Rufford Small Grants Programme.
Conservation education and outreach programmes			Yes	Awareness activities about bats in general and about the endemic, endangered Hipposiderid bats – Kolar leaf-nosed bat <i>Hipposideros hypopyllus</i> and Durga Das's leaf-nosed bat <i>Hipposideros durgadasi</i> in particular were conducted in the schools in in different parts of Kolar district including the Hanumanahalli village. Various stakeholders, including: the Principal Chief Conservator of Forests (Wildlife), Karnataka Forest Department; the Member Secretary, Karnataka State Biodiversity Board; the Deputy Conservator of Forests (Wildlife) and the Deputy Conservator of Forests (Social Forestry), Kolar Division; the Deputy Commissioner of Kolar District; Assistant Commissioner of Kolar district and the officials of Mines and Geology Department were made aware about the endemic species, the threats to the species and their habitat, the importance of the species to the environment and also State of Karnataka and the need to conserve the species.
Capacity building and community participation			Yes	Although capacity building programmes could not be held at the State Forest Department (for various technical reasons), few of the Forest Department Staff (ranging from ground staff to administrative staff) stationed at Kolar District and a few educated youngsters from the Hanumanhalli village have been trained about the importance of monitoring the habitat and the cave site of the species. The villagers in general, who participated in the awareness activities showed complete support to our team efforts and we could help them form a Biodiversity Management Committee. The awareness created among the officials helped in achieving a ban on any mining in and in the

				surrounding area of Hanumanahalli village, which has resulted in the improvement of the habitat at the cave site. The villagers attribute this improvement to the joint efforts by the villagers and our team toward the conservation of the species.
--	--	--	--	---

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

The difficulties that were encountered included

1. Although we had security concerns to work during the night as it was a mining area, the villagers supported us completely and ensured our safety.
2. The unavailability of the elected head of the village and other elected members of the village Gram Panchayat many times during our visits hampered and delayed our efforts to form a Biodiversity Management Committee. After much efforts it got finally got formed in October 2015, and later the newly formed BMC members were unavailable for us to create awareness about the newly formed BMC and its important role in conservation of the species.
3. Unpredictable and rough weather for a period of 2 months followed by extreme cold in December 2015 and January 2016 hampered the field work and subsequent data gathering on the echolocation calls of the bats. Only in February 2016 we could achieve this target.
4. The bats were calling at a very low amplitude and multiple attempts to record their calls could not be met with success. Very recently in February 2016 we captured the species and could successfully record hand held calls of these endemic species for the first time.

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

Outcome 1 – Our awareness activities via the print media (both local and national) and representations to various government officials have resulted in achieving a ban on any mining activity in the area surrounding the roost site which has resulted in considerable improvement in the habitat condition. This improvement has been attributed to the presence of bats by the villagers and they consider these bats as a religious symbol. This has resulted in their conviction to fight even more fervently toward the conservation of the habitat that any small disturbance to the habitat is not being tolerated. The major achievement is that the whole community is supporting the team and its efforts to achieve complete protection to Kolar Leaf-nosed bat and its habitat.

Outcome 2 – Our proposal of recognising the site as a Biodiversity Heritage Site to the Member Secretary, Karnataka Biodiversity Board, Government of Karnataka was met with positively and he has in turn proposed to the PCCF (WL), Karnataka Forest Department, Government of Karnataka to recognise the site as a wildlife/bat sanctuary thereby providing complete legal protection to the site and the habitat of the species.

Outcome 3 – The echolocation calls of two endemic Hipposiderid bats of India – namely, the Kolar leaf-nosed bat and the Durgadas’s leaf-nosed bat, could successfully be recorded on the Petterson D500X Bat Detector, which is the first for these species in the world.

Outcome 4 – My scientific advisor and I have recently contributed to the reassessment of the IUCN status of the Kolar leaf-nosed bat *Hipposideros hypophyllus* and have assessed it as being Critically Endangered due to its very small population size, continued threats to the habitat and it being confined to only one roost in the whole of the world.

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

Right from the very beginning the local community was involved in the project. Emphasis was on creating awareness among the community about the importance of the existence of the endemic species, their conservation, and the effect of conservation of the habitat on the species and the community in general. They became a significant part of the project. The attitude of the local community changed from being aloof to the ongoing mining, sometimes being a part of the mining process to **opposing mining completely** and supporting our efforts to achieve ban on mining at the site and its surrounding area. This attitude change among the villagers and our continued presence in the area and the awareness that we created among the District Administrative and Forest Department staff have brought in a change among other communities surrounding the area. The local community has taken up responsibility of the site and have ensured effective implementation of watch and ward in the area and also restricting traffic to go past the site by erecting barricades on the roads near the site. This is leading to considerable change in the habitat quality. Additionally, with good rains in last monsoon and change in attitude of local community who stopped draining the eater for irrigation purpose, the village tank located beside the site is filled with water to the full tank level which in turn has led to replenishment of the water table. They have now supported our plea to the Member Secretary, Karnataka Biodiversity Board, Government of Karnataka to recognise the site as a Biodiveristy Heritage Site, thus ensuring protection to the species and its habitat. With the community being supportive of our efforts we could help them form a Biodiversity Management Committee.

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

Yes. I will like to continue my study, the echolocation call database that has been collected of the endemic Hipposiderids would be analysed and published. This data would be helpful in surveying further localities for the presence of these endemic species and help in conserving such populations.

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

I plan to publish the results of my study in international peer reviewed journals after detailed data analysis. I also plan to come out with a popular article highlighting the importance of involvement of the local communities toward conservation of species and habitat. I also intend to create awareness about my case study among a wide audience, such that others working on similar lines on other species would be able to gain valuable insights with the methods used by my team and I and help in achieving protection to different other species. I also plan to prepare a poster on the Bats of Kolar District and disseminate the poster among the staff of the Forest Department, at the schools and colleges in Kolar District, thus making people aware of the bat species richness and unique identity

of Kolar due to the presence of the rare and endemic species and the importance of their knowledge and conservation.

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

The RSG was used over a period of 15 months from January 2015 to April 2016. The project had to be extended as meetings with various officials had to be carried out for the purpose of ensuring protection to the species, the site and the surrounding habitat. Also time and again posters, letters were sent to the officials in support of the species to be conserved.

**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
Petterson D500X Bat Detector and microphone	1800	2238	+438	An external microphone with cable of 1 m length was bought along with the detector. The shipping charges and the charges for buying the microphone increased the actual amount spent on procuring the bat detector.
Stipend for the team during survey, conservation education & field work	1200	1000	-200	The amount for contingencies and logistics was adjusted from the team stipend and from other sources.
Cost of hiring vehicles/transportation/fuel charges	900	980	+80	The vehicle hiring charges increased due to increase in price of fuel. This also included the train ticket charges and bus ticket charges for all the team members to and from the study site to the headquarters.
Conservation education materials, T-shirts, posters, pamphlets etc.	600	710	+110	More number of school students and officials were targeted for conducting awareness campaigns and posters, stickers and reading material on bats were given away to each individual hence the cost of preparation increased.

Logistics, contingencies, medical insurance	500	72	-428	The budget for medical expenses and other contingencies was adjusted from the team stipend and personal resources to adjust additional expenditure.
<b>TOTAL</b>	5000	<b>5000</b>	00	

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

1. Inclusion of the endemic *Hipposideros hypophyllus* as a protected species under the Indian Wildlife Protection Act.
2. Declaration of the site as a wildlife/bat sanctuary, helping conserving and protecting these rare and endemic species of Hipposiderids from extinction.
3. This case study, the importance of positive involvement of the local communities by creating awareness and making them responsible for the habitat of their area and the outcome would be highlighted and communicated to a conservation journal to help conserve other such species from extinction.

### 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?

The RSGF logo was used on stickers, banner, posters that were prepared and disseminated among the school and college children of various institutions in Kolar district and also the officials of various departments. The RSGF was acknowledged in the awareness talks on bats and the status and conservation importance of the rare and endemic Hipposiderids given in Methodist Girl's High School, Kolar, Canara Bank Self Employment Training Centre, Honnenahalli and Gyanabodha High School, Honnenahalli, Kolar.

### 11. Any other comments?

I wish to thank the Rufford Small Grants Programme for funding this project, their constant support and patient understanding of circumstances that have delayed the project, and for their flexibility.

