

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. 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	Passanan Cutter
Project title	Ecology and Conservation of Fishing Cats (<i>Prionailurus viverrinus</i>) in Thailand
RSG reference	13.11.07
Reporting period	September 22 2009
Amount of grant	£5000
Your email address	Cuttete015@umn.edu
Date of this report	September 22 2009

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
1) Carry out an in-depth ecological investigation of fishing cats at Thale Noi Non-hunting Area in southern Thailand.			x	Although we originally proposed to launch our research work at the Thale Noi Non-Hunting Area, our discovery of a much more suitable study population at a new site convinced us to shift our focus to Khao Sam Roi Yod National Park and surrounding areas in Prachuap Kiri Khan province. This has turned out to be a good decision. Since December 2008, we have carried out interview surveys in three villages surrounding the study site, conducted extensive sign surveys, conducted ongoing camera trapping, and successfully captured and collared 14 fishing cats. Between captures and camera trapping, we have been able to identify 22 unique individuals.
2) Initiate a focused conservation campaign centred around wildlife in this area.			x	At the new site we have recruited four local villagers to help the project. We also collaborated with a local environmental conservation group and participated in their outreach activities. We also produced our own online nine-minute length documentary and recently have been the focus of a weekly Thai television news magazine program (called "Knowledge is Guidance", a programme that shows at 4pm every Saturday) that dedicated two full half-hour segments to the projects main messages: fishing cat conservation, wetland conservation, and local knowledge and involvement.
3) Carry out rapid assessment surveys at several additional sites where the occurrence of fishing cats is reported or predicted by habitat conditions.		x		What started as a rapid assessment of Khao Sam Roi Yod National Park has turned into a full-time effort to study and conserve the largest documented population in southeast Asia. We hope to conduct rapid assessments of other potential areas in the next several months.

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

The most significant unforeseen difficulty has been getting the required permit to establish our work at the newly discovered site. In part, this has been due to the fact that the study area spans two jurisdictions: the area adjacent to the park is under the control of the Wildlife Conservation Division but area inside the park is under the National Park Division. The process has taken much longer to approve because our proposal had to be reviewed by these two different divisions (although they're both under the same department "the National Park, Wildlife and Plant Conservation"). Thankfully, the chief of the park has been a strong proponent of the project and after several months, we received all necessary permissions.

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

- a) We obtained concrete evidence of fishing cat occurrence and breeding at Khao Sam Roi Yod National park in the form of photos, video, tissue and blood samples, and skin and skeletal specimens.**

Reports of two captive fishing cats in December of this year at Khao Sam Roi Yod prompted us to carry out sign and camera trapping surveys initiated in the area adjacent to the southern boundary of the park. Once sign and camera trapping surveys had confirmed at least 10 different individuals, we began trapping, sampling, and collaring cats. To date we have captured 14 individual fishing cats—7 males and 7 females. We fixed radio collars on all but one (a 3 month-old male for which we did not have a small enough expandable collar but we collected biological samples for further genetic study and disease screening).

We have also collected the remains of two cats that were killed by poachers in the course of the study and intend to donate these specimens to the Thai National Museum of Natural History for their permanent collection.

- b) We recorded several previously undocumented aspects of fishing cat ecology through the use of telemetry, automated camera and video "traps", and faecal diet analysis.**

We used camera trapping techniques to identify individuals by setting up two cameras at each trapping station to capture the left and right patterns of the cats. The patterns were then used to identify each individual to facilitate a potential density estimate using mark-recapture techniques. Together with telemetry tracking of each radio collared cat both techniques provided valuable data where we can map out home ranges of each cat and their movements in an area.

Approximately 180 fishing cat scats have been collected and we are now in the process of extracting data on prey species and seasonal diet patterns. We intend to continue the intensive faecal diet study for another 6 months to allow for a full year of seasonal comparisons.

- c) We have carried out a number of education and other public outreach activities to promote the conservation of fishing cats and their habitat.**

We initially engaged local residents through surveys to learn about the occurrence and habits of fishing cats in the area and about people's attitudes towards them.



When we began intensive survey activities, we hired one local man to work for the project full time and arranged with the chief of the park to have one staff member work half time on our project. More recently, we have hired two more local residents to assist with sign surveys, camera trapping, telemetry, and communicating with other local residents.

Other outreach activities include collaborating with local environmental conservation groups where we presented our work, participating in their campaigns and meetings.

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

One of our project objectives is to involve as many local residents as we can with the project work. Since we started we have trained and hired two permanent villagers, two on a temporary basis and hired several park rangers who are also from the villages around Khao Sam Roi Yod. Their jobs are to interact with the community, to send messages about the project updates and help raise awareness within the community. They also helped with interview surveys in three villages surrounding the study site. Villagers also reported their fishing cat sightings or loss of their livestock to our assistants where we have responded to the situation by setting up a live trap to capture one troublesome cat and relocate it another site where it will be safe and ensured of food availability.

5. Are there any plans to continue this work?

Even though the proposed budget from the Rufford is to cover our work for one year, our work involves long term monitoring of fishing cat movements and conservation of the species which involve local community. We foresee that working with the community is a long term process and people need to understand the importance of the work and how they will benefit from conserving fishingcats. At the moment we are permitted to work until the end of 2012, which after that if the work goes well we will seek extension of the project.

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

We have a growing communication strategy based on our website, television and newspaper coverage, regular reports (distributed through the website and directly to colleagues, supporters, etc.) and scientific journals.

We continue to develop the website where people can learn about fishing cats, get project updates, and even view profiles of many of the individual cats we have identified and come to know. We are working to make the website fully bilingual (English and Thai). One feature of the website is a short documentary explaining the project's objectives and methods.
(<http://www.fishingcatproject.info/en/home>)

In August, the *Singapore Straits Times* featured the project as an example of the importance of conserving wetlands throughout Asia. (<http://blogs.straitstimes.com/2009/8/14/kingdom-of-the-cat>)

Currently (late September 2009), ThaiPBS, a Thai television and news network, is featuring the project in a two part documentary after visiting the project from the 8th -12th September. The first part of the documentary was aired on 26th September 2009 and is available online at

http://www.thaipbs.or.th/clip/index.asp?content_id=214823. The second part will air on October 3rd.

In January 2009, the project PI attended an international conservation conference, the “Small Felid Conservation Summit” event held in Bangkok and organized by the IUCN Cat Specialist Group, the Point Defiance Zoo, the Smithsonian’s National Zoo, and the Thai Department of National Park, Plant and Wildlife Conservation. A summary of the conference (along with a link to the full conference report) can be found at our website at: <http://www.fishingcatproject.info/en/news/92-small-felid-summit>.

We have recently submitted a paper reporting on the project’s documentation of fishing cats at two sites in Thailand to *Cat News*, the IUCN’s peer-reviewed journal on felid ecology 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 grant was used between November 2008 and September 2009. We had anticipated an earlier start date to this phase of the project but had to postpone field activities due to unforeseen permitting issues.

We are now expecting the project to continue for at least two more years.

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
Primary Investigator per diem	519	519		This item has been used as per diems for PI while in the field
Assistants x 3	3360	3360		The fund from this item was used to hire 3 local assistants
Food for field survey	56	56		The fund from this item was used as additional to fund sought from other sources for on going field survey since the launch of the project
Fuel	243	243		The fund from this item also was used to cover fuel for field survey
Maintenance (camera traps/field vehicles)	528	528		This item is used mostly for the maintenance of field vehicle such as motorcycles and truck
Posters	294	294		This money was used for the production of posters and brochures which got distributed locally.
Total	5000	5000		

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

Important next steps for this project include:

- 1) Conducting a detailed analysis of data collected to date.** We have been lucky to find a richer source of data than we ever anticipated and have been able to calculate preliminary estimates of home range, diet components, and other insights. However, more intensive data analysis will be carried out by the project PI over the next several months.
- 2) Continuing field monitoring of collared animals.** It is clear that we have a unique opportunity for new insight into this species so we will continue to monitor the movements of a number of collared animals into the foreseeable future.
- 3) Concluding genetic analysis and disease screening of blood and tissue samples.** This work is to be completed by Dr. Parntep Ratanakorn at Mahidol University's College of Veterinary Science and Director of The Center for Monitoring and Surveillance for Zoonotic Disease in Wildlife and Exotic Animals (MoZWE), over the next two months.
- 4) Expanding outreach activities.** A growing interest and sense of pride among local residents has been further enhanced by recent media attention. We have gained the support of key local leaders who have asked us to take part in a number of community events with the intention of integrating fishing cat and other conservation objectives into local planning and other activities.
- 5) Writing and submitting at least one scientific paper** based on the data collected to date.
- 6) Drafting a management and conservation plan for fishing cats in and around Khao Sam Roi Yod.** The plan will focus on strategies to reduce human – fishing cat conflict (primarily problems with cats raiding chickens and associated retribution events such as shooting or poisoning cats) and on enhancing the number, persistence and quality of refuge habitat patches in and around Khao Sam Roi Yod.
- 7) We also see the importance of continuation of the conservation campaign focusing on fishing cats that involves local community.** At this state we have initiated local involvement and collaborate with local environment group and promote our project though national television, posters, brochures and through friends and will continue to maintain collaboration with people this way group.

Our other plan is to establish Education activity where an education team will be sent out to participate in schools, field activities etc.

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 use the RSGF logo (linked to the RSGF website) on our website where we actively post project updates and communicate project progress to a diverse audience inside and outside of Thailand. We also use the logo on material project posters, brochures (available on our website and distributed in and around our study area), PowerPoint presentations and reports.

11. Any other comments?

I would like to give my sincere thanks to those working at Rufford Small Grants Foundation. I could not have carried out this project without your generous support and I am so grateful to receive such kind support. Thank you.