

FINAL REPORT

CONSERVATION OF ASIAN ELEPHANT POPULATION IN PU MAT NATIONAL PARK, VIETNAM

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Project starting date: March 1, 2016

Anticipated completion date: April 30, 2018

2. List the overall and specific conservation needs this project addressed.

This project will make contributions to understanding elephant populations in Pu Mat National Park including information on the population size, structure, distribution, and movement that can be used to direct conservation efforts for the species. The project will also raise the awareness toward elephant conservation and human-elephant conflict solving among local communities. This project will also explore the use of acoustic signal for Asian elephant monitoring.

- 3. Summarize the goals and objectives and describe any changes in goals and objectives from the original proposal.
- (1) To survey the population size, spatial and temporal patterns of elephant distribution and movement in Pu Mat National Park.
 - (2) To raise the awareness toward elephants conservation among local communities.
- (3) To test the application of infrasound in monitoring Asian elephant in order to replace human surveys.

We have changed the objectives from the original proposal. The objectives of using infrasound in monitoring Asian elephants have not been fully achieved.

4. For each objective, describe the specific actions taken to achieve that objective.

In order to achieve this objective 1, we conducted field survey in two seasons of the year and interviewed local people in the study area. We conducted transect survey and point transect surveys. The presence of elephants and their footprints, dungs were recorded.

In order to achieve objective 2, we met local people and talking about the importance of elephant conservation and give them a T-shirt depicting elephant as a gift.

In order to achieve objective 3, we installed automated recorders in the forest. We then analyzed the recordings in RAVEN software to detect the spectrogram of the elephants' sounds.

5. Describe any activities that differ from the original proposed actions and explain the reason for the change.

We followed the proposal.

6. Describe the conservation outcomes for elephants, wildlife, habitat and human communities, and list major findings and accomplishments to date.

We have indentified the general distribution and movement of elephant population in Pu Mat National Park. The population has 7-8 animals (two sub-population), mainly living in the south and central parts of the

park. Sub-population 1 has 6-7 animals, mainly distributed in the Phuc Son commune, Anh Son district, Mon Son commune, Con Cuong district and Thanh Duc commune, Thanh Chuong district. The most monitoring effort should be focus on these areas. In the autumn and fall, the elephant population approach to the residential areas. We also indentified the threats to elephant and the site where human-elephant conflict occur.

The awareness of local people toward the elephant conservation has been raised. T-shirts with IEF logo and the photo of elephant have been provided to the local.

7. Approximately how many humans are impacted by your project? Approximately how many elephants are impacted by your project?

Approximately 60 families (250 people) are impacted by the project. Eight elephants are impacted by the project.

8. Describe any problems discovered or occurring during this grant period

There has not been any serious problem discovered during the project implementation period.

9. Was your project successful? State short and long term goals that you are using to evaluate your accomplishments.

Our project has detailed information on the elephant population such as size, structure, and distribution. Especially, the movement map of the population has been made. This will be critical for the national park to design effective actions to protect the elephant population and mitigate the conflict between elephants and local people. We also raised the awareness toward elephant conservation among local people. However, the objectives of using infrasound in monitoring Asian elephants have not been fully achieved. The elephant population there is small and moves in a very large area. Although we had recordings available, but we did not detect the spectrograms of elephants calls in the recordings.

10. Based on this Project, what is the "next step" for this project and does it have implications for future conservation actions?

In the next period, we will publish the project result in the national journal. We found the feeding area of the elephants contains bamboo forest remnants. We will suggest the relevant authorities in protecting these bamboo forest remnants.

11. Provide at least one human interest story. This story should enable the reader to identify with the people, a problem, day-to-day situations, achievements or a funny or strange occurrence during the course of the project. Examples: a story about when the bull elephant put his tusk through the window of the research vehicle or the

lion with a snare on his leg and the many weeks it took to find the animal and remove the snare or a specific family who benefitted due to the project. If available, please include a photo of the incident described.

When we met some local people and asked them about elephants, people called them "Ong Ion" in Vietnamese or "Respected Sir" in English. One local person even told us that we should not use the name "animal", we should use the name "Respected sir" for animals. They don't say any bad words about elephants because they afraid the elephants has "sixth sense", they can hear what human being saying about them even a km away. If someone talks badly about the elephants, the elephant swill come back to revenge. They also told us some stories in the past to convince that the elephant can come back to revenge local people.

12. In 500 words or less, summarize the progress and results achieved. This will be used for media and donor recruitment.

We have determined the area of elephant's occurrence and population size with thin the Park. We have indentified the general distribution of elephant population in Pu Mat National Park. The elephant population is divided in 2 sub-populations.

Sub-population 1 has 6-7 animals, mainly distributed in the Cao Veu village, Phuc Son commune, Anh Son district and Ban Yen village, Mon Son commune, Con Cuong district and 15/7 village in Thanh Duc commune, Thanh Chuong district. The elephants intensively inhabit in Khe Xuc, Khe Mai and Khe Re sites. This population usually approach to cultivation areas from August to January of the next year. At other time of the year, the elephant inhabit the natural evergreen forest near the bolder with Lao. Sub-population 2 has only one animal, mainly distributed in Khe Kem, Luc Da and Mon Son communes, Con Cuong district.

We have made the map of elephant distribution and movement in the area. The feeding areas of the herd near the residential area are estimated to be 13,090ha.

Additionally, we have identified several threats to the species in the area, including deforestation, especially the replacement of bamboo forest by Acacia and Rubber plantation and agricultural encroachment. The elephants intensively use the bamboo forest remnants for foraging; therefore, the shifting of this forest to other land uses such as rubber plantation should be reduced. We have raised the awareness of local people toward elephant conservation.

12. In 50 words or less, summarize the progress and the results achieved. This will be used for social media.

We have determined the area of elephant's occurrence and population size in the studied area. The map of elephant herd movement was also made. We also addressed the threats to the elephant population.

Additionally, we raised the awareness of local people toward elephant conservation.

13. List all organizations associated with this project and their roles in the project.

Department of Wildlife, Vietnam Forestry University: Conducting the survey and data analysis, and conservation education activities.

Nghe An Province's Forest Protection Department: Staff of this agency also assist the project.

Pu Mat National Park: Park rangers assist the surveys and participated in conservation education activities.

Local people help also assisted the project implementation.

14. Include a financial report of International Elephant Foundation funds spent.

Financial report of the project

ITEM	Cost
Personnel	
Salaries for field staff/assistants (For field survey, moving	2010
recorders and changing betteries, memories disk)	
Travel expense	0
Travel from Hanoi to the field site	740
Travel in the field by hired motorbike	720
Food and lodging	0
Food for 02 field assistants and an investigator	2060
Logging for investigator	735
Equipment	0
Recorder: The Song Meter SM3 with GPS clock option and	3100
accessories	3100
Supplies	0
Headlamp; Field clothes and shoes; Backpacks; Compasses;	
Insect repellent and leech socks; Rain jackets; Cooking	250
equipment	
Medical kits	100
Tents	150
Batteries for recorders and digital equipment	160
Miscellaneous expenses	0
Designing and producing T-shirts	450
TOTAL	10475

15. Submit at least five high resolution digital images (350kb or over) representative of the Project as separate individual files. Please include at least one photo with an elephant in the frame that demonstrates your project activities.

We attach the photo with this report.

16. Submit at least one video clip explaining the goals, objectives and significant outcomes of your project. Please very briefly acknowledge the International Elephant Foundation. **If English is not your first language,** please provide a written transcript of the text. Please do not add music to your video.

The video is submitted with the final report.

17. A copy of all future publications that result from this study.

We summit a project report on the status and distribution of the Asian elephant population in Pu Mat National Park. This report is also sent to relevant authorities.

We will publish a paper relating to the results of the project in a journal and submit to IEF later.

18. Please list all websites, blogs, social media accounts, etc associated with the project, its investigators, and organizations (this includes, Facebook, Twitter, Instagram, etc)