Research Activity Report Supported by "Leading Graduate Program in Primatology and Wildlife Science"

(Please be sure to submit this report after the trip that supported by PWS.)

	2016. 6. 14
Affiliation/Position	Wildlife Research Center / M1
Name	Mayuko NOMOTO

1. Country/location of visit

Yakushima, Kagoshima, Japan

2. Research project

Yakushima Field Science Course

3. Date (departing from/returning to Japan)

2016. 5. 21 - 2016. 5. 27 (7 days)

4. Main host researcher and affiliation

Dr. Hanya, Professor at Primate Research Institute, Kyoto University

5. Progress and results of your research/activity (You can attach extra pages if needed)

Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.

In this course, we were divided into 3 groups, Monkey group, Deer group, Fig/Insect group. I participated in Deer group with 5 students and 3 instructors. We observed social interactions of "Yakushika" (*Cervus nippon yakushimae*), endemic subspecies to Yakushima and Kuichinoerabujima, and collected their feces. The purpose of this course is to understand the methods of identifying sex and mitochondrial haplotype from noninvasive samples. And deer group's final purpose is to clarify the relationship between social interactions and mitochondrial haplotypes of wild sika deer.

The schedule was as follows:

- 5. 21: Arriving at Yakushima and observing monkeys, deer and plants at north-west coast.
- 5. 22: Learning how to record observations and collect fecal samples and trying that.
- 5. 23: Recording data and collecting fecal samples
- 5. 24: Recording data and collecting fecal samples
- 5. 25: Analyzing the data and preparing for presentation
- 5. 26: Preparing for presentation, giving presentation and enjoying BBQ party
- 5. 27: Cleaning the rooms, going sightseeing to Siratani Unsuikyo and going back to Kyoto

In spring, the antlers of male drop out and newly grow. As they get older, their antlers become bigger and drop off earlier. So some of adult males have new antlers covered by velvet, some of them have no antlers (just dropped off), others have old antlers in May.



Males having new antlers(left) and old antlers(right)



Sitting and ruminating

Research Activity Report Supported by "Leading Graduate Program in Primatology and Wildlife Science" (Please be sure to submit this report after the trip that supported by PWS.)

I felt it difficult to continue observation keeping a suitable distance with focal deer. One teacher told me it is important to predict the direction toward which the focal individual goes and keep the same altitude as it stays at. In addition to that, it also difficult for me to identify adult females without telemetry collars. Anyway this course was good experience for me.





juvenile of monkey trying to snatch a lunch from us

Adult female with telemetry collars

The result shows that females like to socialize to do affiliative interaction and males don't have many interest to young. Young approached a lot to adult female, but they received grooming a lot. The female which the young approached was probably its mother.

We are going to conduct the experiments of sex identification and mitochondrial haplotypes identification in Genome Science Course and analyze the difference of the social interactions among individuals depends on their mitochondrial haplotypes. Then we are giving poster presentation on The 5th International Seminar on Biodiversity and Evolution.

6. Others

This course was supported by PWS Leading Graduate Program. I am deeply grateful to Prof. Hanya, Prof. Agetsuma, Ms. Agetsuma, Dr. Nishikawa and all instructors and members who helped me.