

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.)

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| | 2018. 6. 14 |
| Affiliation/Position | Graduate School of Asian and African Area Studies, Kyoto University / M1 |
| Name | Tamaki SHIMEGI |

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| 1. Country/location of visit |
| Yakushima, Kagoshima prefecture, Japan |
| 2. Research project |
| PWS Field Science Course, studying the distribution of <i>Macaca fuscata yakui</i> |
| 3. Date (departing from/returning to Japan) |
| 2018. 5. 19 – 2018.5. 25 (7 days) |
| 4. Main host researcher and affiliation |
| Dr. Han'ya, Associate professor at the Primate Research Institute, Kyoto University Dr. Sawada, Dr. Kurihara, and Mr. Honda |
| 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. |
| <p>Summary:</p> <p>The goal of this field course in Yakushima was to obtain knowledge and skills for outdoor wildlife fieldwork. Using GPS, we collected detection data of Yakushima macaques (<i>Macaca fuscata yakui</i>) with the goal of describing the distribution of macaques on the island. To accomplish this, we recorded direct sightings, sounds, and feces locations. Feces that were relatively fresh were collected as DNA samples, which would be used in the genome course in the following week (Figures 1 and 2). After data collection was completed, we used QGIS and GLM to analyze how altitude and human activity, such as distance from villages and land utilization, affects distribution of Yakushima macaques. We concluded that the macaques are mostly distributed further away from human activities and closer to forests.</p> <p>Methods:</p> <p>The detailed record of our activities and methodology for each day of the field course is as follows:</p> <p>May 19 (Saturday)</p> <ul style="list-style-type: none"> • Air travel from Osaka International Airport → Yakushima Airport • After arriving in Yakushima, we observed the Yakushima macaques on the Seibu-rindo, learned about their ecology, how to distinguish their age and sex, and how to collect feces samples. <p>May 20 (Sunday) – May 22 (Tuesday)</p> <p>Field survey</p> <ul style="list-style-type: none"> • We performed a census using GPS along the forest roads of Yakushima and recorded data on Yakushima macaques including sightings, sounds, and feces locations. In addition to recording the GPS coordinates of feces, relatively fresh feces were also sampled with the purpose of being used for DNA analysis in the following week <p>May 23 (Wednesday)</p> <ul style="list-style-type: none"> • We received instruction on the basic use of QGIS. • We began the analysis of data collected on May 20-22 and input of the GPS coordinated into QGIS. <p>May 24 (Thursday)</p> <ul style="list-style-type: none"> • Concluded the input and analysis of data which began on May 23. |

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- In the afternoon, members of the plant team and their advisers presented practical achievement results.
- Yakushima Field Station

5/25 (Friday)

Returned from Yakushima Airport → Osaka International Airport

Results:

After thorough analysis, it is evident that Yakushima macaques tend to be distributed at a distance from villages and farmlands, in the more highly forested areas of Yakushima. In addition to the practical skills of field work, QGIS use, and data analysis that I developed in this course, I believe that it was also beneficial for my academic English fluency to discuss research topics throughout the week with students of different backgrounds and languages.



Figure 2 A student on the monkey team collects feces of a Yakushima macaque



Figure 1 Yakushima macaque feces

6. Others

I would like to thank Dr. Han'ya, Dr. Sawada, Dr. Kurihara, and Mr. Honda for advising the monkey team, and for their guidance support during the course. I am also grateful to my team members for their collaboration and hard work, both in data collection and analysis. Finally, I would also like to thank PWS for organizing and financially supporting this field course which I found to be a professionally and academically enriching experience.