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

|                      | 2018.6.8                    |
|----------------------|-----------------------------|
| Affiliation/Position | Wildlife Research Center/M1 |
| Name                 | Masamitsu Nakano            |

### 1. Country/location of visit

Japan, Yakushima

### 2. Research project

Study on PWS, CETBio

## 3. Date (departing from/returning to Japan)

2018.5.19-2018.5.26 (7days)

## 4. Main host researcher and affiliation

Dr. Hanya, Professor at Primates 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.

During this practice, investigated the distribution of Yakushima macaques that are subspeacies of Japanese macaques widely live in Japan and the influence of the land use and elevation to the distribution of Yakushima macaques as a member of Monkey group 1.

At first, we recorded the census routes and locations of the detection (directly, feces, vocalization) by using GPS. Then we mapped these data on the Yakushima map using QGIS software. We also analyzed the relationship between the distribution and the land use and elevation. For this analysis, at first we segmented the census routes into 500m replication on QGIS, then we generated a 250m-buffer around the middle points of each segments. In GLM analysis, we set "presence/absence of monkey" as a response variable and contained "distance from village", "Land use" and "elevation" as explanatory variable.

As a result, there is no significant relationship between monkey presence and elevation, proportion of agriculture and forest. Otherwise the proportion of agriculture and distance from village significantly influence the distribution of monkey.

In Yakushima island, macaques are partly harmful so human activity possibly influence the distribution of monkey. But we couldn't get any kinds of results indicated the relationship in area of agriculture taken some kind of measures. In this practice, we took a census of the limited area in Yakushima island, so if we collect data widely we could reveal the factors possibly influence the monkey distribution.

This practice was a good opportunity to learn how to sample in field and analyze the data. Due to Yakushima island is a UNESCO world heritage site, the balance of human activity and nature must be kept. I could experience about that in this practice and this investigation.



Overview from Yakushima island



Yakushima macaques

6. Others