

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

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Affiliation/Position	Universiti Sains Malaysia, MSc. Candidate.
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1. Country/location of visit
Yakushima Island, Kagoshima, Japan.
2. Research project
<p>Monkey and Deer Team.</p> <p>Investigate relationship between vegetation types and elevation towards detections of Japanese Macaque (<i>Macaca fuscata yakui</i>) and Sika deer (<i>Cervus nippon yakushimae</i>) in Yakushima Island.</p>
3. Date (departing from/returning to Japan)
<p>13th May 2017 (Osaka → Yakushima)</p> <p>19th May 2017 (Yakushima → Osaka)</p>
4. Main host researcher and affiliation
<p>Dr. Hanya Goro (Associate Professor, Section of Ecology and Conservation, Department of Ecology and Social Behavior, Primate Research Institute, Kyoto University (KUPRI))</p> <p>Dr. Hongo Shun (Lecturer)</p> <p>Dr. Kurihara (Lecturer)</p> <p>Mr. Honda (Lecturer)</p>
5. Progress and results of your research/activity (You can attach extra pages if needed)
<p>Arrival in Yakushima Island.</p> <p>13th May 2017 (Day 01)</p> <p>Upon arrival at PWS, participants rested their bags in respective rooms. We were then brought for a brief walk with introduction to flora and fauna of the island by different lecturers. Later in the same day, Monkey and Deer Team (hereafter refer to as MDT) got together to discuss about the plans for the next few days. Due to the limitation of knowledge about the island, participants were divided and assigned to different survey routes based on the best arrangement by the lecturers.</p> <p>Data Sampling and Analysis</p> <p>14th May 2017 (Day 02)</p> <p>In ensuring data collection was standardized among all participants, in the morning, MDT drove and went along a main road in Yakushima, known to have the highest density of Japanese Macaque. For approximately two hours, the team, led by Dr. Hanya, was taught on behavior, calls and other sounds made by the Japanese Macaque. Wherever available, fruits and seed consumed as part of the diet of the Japanese Macaque were also shown (e.g ‘Bari-bari’ seed and wild strawberry). Dr. Hanya also demonstrated how fresh feces sample should be treated and collected, for the purpose of the upcoming Genome Course in the following week. MDT returned to PWS to discuss on the sampling protocols and types of data to be collected in achieving the field work’s objective.</p> <p>In the afternoon, MDT headed out to assigned routes (consisting mainly on paved and logging roads) for data collection. I was sent to Oko2 logging road where I surveyed the logging road together with Mr. Honda. Apart from being advised on the suitable speed for the survey, I was shown places where the Japanese Macaque are more likely to deposit their feces. Covering approximately 2km in distance, we managed to detect some feces and spotted some deer. No direct sightings of Japanese Macaques were made.</p>

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15th May 2017 (Day 03)

MDT woke up at 4 in the morning, in preparation to depart for a hike to the summit of Mount Miyanoura – the highest point in Yakushima Island at 1936 m a.s.l. The driving journey to the starting point took approximately an hour and a half from PWS. The hike started at approximately 7am. Due to the good weather, the team managed to reach the summit in about 4.5 hours. We spent an hour at the peak enjoying the panoramic view of Yakushima. The total time took to reach to the pick-up point was 3.5 hours. During the journey, the team spotted several Japanese Macaques, their feces and four deer.

16th May 2017 (day 04)

Despite the long, tiring hike to summit of Mount Yakushima, MDT headed out early for last day of field survey for data collection. I was tasked to carry out my survey in Koseda. The route consisted partly of dense undergrowth logging road, to clear logging road and paved road in a cedar plantation. Apart from old and fresh feces of Japanese Macaque, no direct sighting of the animal was made. Deer was also not detected in that area. The survey ended around noon.

17th May 2017 (day 05)

All data is being compiled and a crash-course on GIS was given by Dr. Kurihara. We extracted and processed vegetation types from the detection points of the Japanese macaques and deer. Step-by-step guide was provided in obtaining the data required for further analysis. Minor errors and troubleshooting were among the reasons MDT spent most of the time trying to process the data. All data were only successfully processed and compiled at approximate mid-night. Types of analysis to obtain the results from the data collected were also being discussed from time to time.

18th May 2017 (day 06)

MDT continued to work on the GIS analysis. Powerpoint presentation was also being prepared for an overall results presentation to other Yakushima Field Course participants, and lecturers. Together with other team member, I was working on investigating if elevation has any effect towards the detection of Japanese Macaque and Deer in places where the MDT has done our survey in Yakushima Island. The results were done just in time for the presentation. Despite minor hiccups during the presentation by MDT, in overall, the team successfully completed the task. The finale for the day was a barbeque session with everyone at PWS.

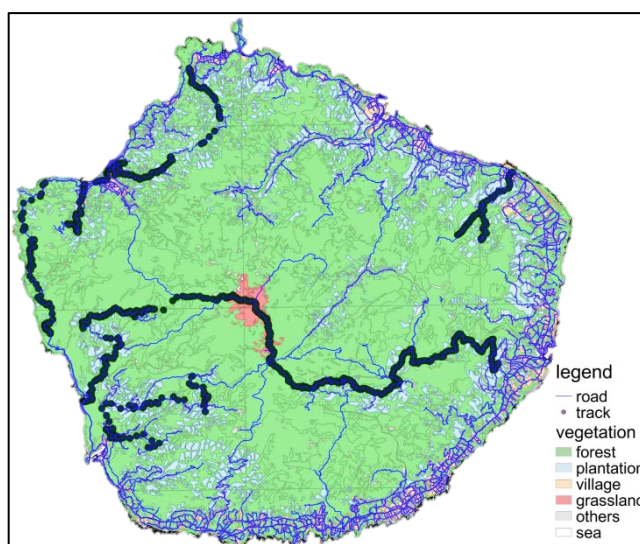
19th May 2017 (day 07)

All participants including the lecturers helped to clean up the PWS field house before headed to Shiratani Unsuikyo Ravine; a World Natural Heritage site in Yakushima. The beauty of this forest inspired a production of a famous animation entitled ‘Princess Mononoke’. We spent about three hours walking in the lush, green nature park. After then we headed to Yakushima airport to depart back to Osaka.

Results

Overall, MDT found that the

- Japanese macaques prefer forested areas, in comparison with other vegetation type area, and they avoid villages.
- Apart from that, the Japanese Macaques were also found to avoid plantation areas, even in areas where hunting is prohibited.
- Detection of primary and secondary signs of the Japanese Macaques is not strongly influenced by the elevation.



Map1: Survey Routes and vegetation types

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Photos



Fig1: Dr. Hanya explaining about some behavior of Japanese Macaque.



Fig2: A hard-texture fruit, which after infected with fungus will become softer and eaten by Japanese Macaque.



Fig3: Japanese Macaque grooming



Fig4: Japanese Macaque chewing on some twigs



Fig5: Feces sample collection for Genome Course.



Fig6: Feces with 'Bari-bari' seeds.



Fig7: Sika deer of Yakushima Island



Fig8: MDT hiking up to Mount Miyanoura.



Fig9: View from Mount Miyanoura.



Fig10: Monkey Deer Team at the peak of Mount Miyanoura

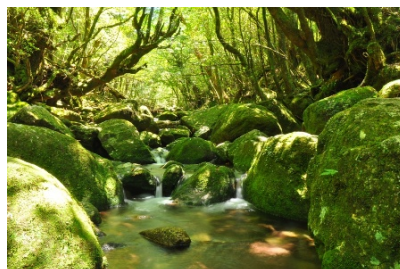


Fig11: Shiratani Unsuiyko Ravine forest.



Fig12: Yakushima Field Course May 2017

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Fig 13: View of the beach at sunset from PWS. Turtle tracks can clearly be seen on the sand.

6. Others

Many thanks to PWS for having me there in their facilities in Yakushima. Great appreciation to Dr. Hanya, Dr. Hongo, Dr. Kurihara and Mr. Honda, lecturers of the Monkey and Deer Team, whom have taught me so much about the field work in Yakushima throughout the Course. Also not to be forgotten, the team that has gave me a memorable time during the trip. Gratitude also to other participants whom I share my room and other facilities with, during the field course.