

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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Affiliation/Position	Universiti Malaysia Sabah/Ph.D candidate
Name	Esther Lonnie Baking

1. Country/location of visit	Yakushima Island, Japan
2. Research project	Field Science Course
3. Date (departing from/returning to Japan)	23 rd of May 2015 to 28 th May 2015 (6 days)
4. Main host researcher and affiliation	Dr. Sugiura (WRC, Kyoto University), Dr. Agetsuma (Hokkaido University) and Dr. Yoshimi (Hokkaido University)
5. Progress and results of your research/activity (You can attach extra pages if needed)	<p>Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief</p> <p>Recently, I have participated in a field course from 23rd until 28th of May 2015 organized by WRC at Yakushima Island. In this course, all participants were separated into four groups i.e. Deer, Monkey, Mushroom and Insect group. I was in the Deer group which led by Dr. Sugiura, Dr. Agetsuma and Dr. Yoshimi. The main purpose of the fieldwork for our group were to collect Yaku sika deer feces in the field and extract DNA samples on the surfaces of the feces for later DNA analyses at Kyoto University. During the fieldwork, we collected feces from identified and unidentified individuals. We used the identification sheet prepared by Dr. Agetsuma and Dr. Yoshimi to find the marked or identified individuals. Those marked individuals have either ear tags or collar transmitters placed around their neck with specific colour patterns. Other than that, each of the marked individuals has been given a name for easier identification and/or for later analyses. In the Deer Group, there were nine members including lecturers. We divided and separated into three groups so that it would be a lot quicker to observe all the targeted individuals.</p> <p>Sometimes it was difficult to find some of the marked individuals as we were not sure enough their exact locations. We went up and down the hills few times a day until we find our targeted individuals. Though it was tough and tiring fieldwork, it was the best experience for me as seeing wildlife in a very close distance is not a usual situation in the forest of my country. I was able to observe a sika deer as close as 2 meter from where I stood (Fig.1).</p> <p>. In order to study the genetic relations among deer, we also recorded the social interactions among identified individuals and other unknown individuals. We selected a focal individual and followed quietly to record its behaviour in every 2 minutes within at least one hour duration. The most common type of interactions that were observed among deer are social grooming (Fig.2), lactating and also replacing others. Other type of behaviours recorded on a focal individuals are grooming (i.e self grooming, scratching body using mouse and hind legs), foraging (i.e feeding, snuffing and walking), moving (i.e walking or running without doing anything), alerting (i.e standing with staring at something or making alarm calls), resting (i.e no action) and ruminating. If the focal individual defecating during the behaviour observation, we will collect DNA samples from the feces just after it defecated.</p>

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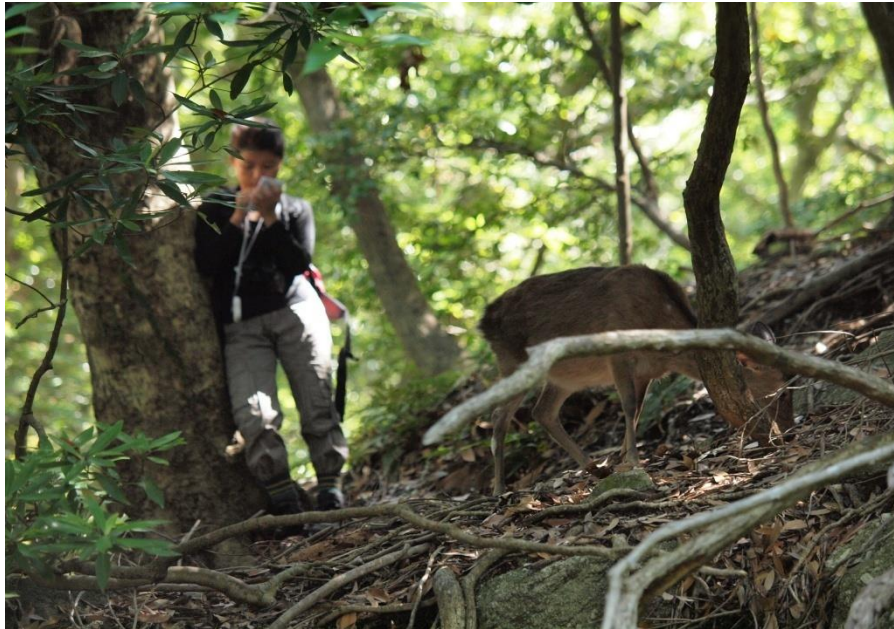


Fig. 1. Following and recording the behavior of focal individual (Photo by Dr. Sugiura).



Fig. 2. The social interaction between deer (Social grooming).

During this field course, we also collected DNA samples from feces under three different conditions i.e. on the forest floor, on exposed ground and in a room. Feces have been collected earlier from three adult female deer on the first sampling (0 day) by Dr. Yoshimi and she divided and set the pellets at each group under three conditions. In this experiment, we observed the surface of the fecal pellets by taking photos and took the DNA samples from three pellets under each condition. We did the similar sampling again on day 3, day 5 and day 10.

In total, we managed to collect 44 samples from 20 identified individuals and 24 unidentified individuals. These samples were brought to laboratory in Kyoto University for further DNA analyses.

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Fig. 3. Group photo of the Deer Team. Standing from left: Dr. Sugiura, Dr. Agetsuma, Dr. Yoshimi, Bugwesa, Hibiki, me, Kotoyo and Natsuko; and sitting: Takuya. (Photo by Kotoyo).

Overall, this field course has been a great experience I ever had so far. It was my first experience working with the Japanese students and lecturers in the field and also in a different type of forest structure. It will be the most memorable and priceless moments for me. I am so grateful with the opportunity given to me and really appreciate the knowledge I gained during this course.

6. Others

Thank you very much to Wildlife Research Centre as the organizer of this course, Prof. Shiro Koshima, Dr. Sugiura, Dr. Agetsuma, Dr. Yoshimi and not forgetting my own supervisor, Assoc. Prof Dr. Henry Bernard (UMS) for choosing me to participate this course.