

**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.)

2017.1.4

<b>Affiliation/Position</b>	PRI/D1
<b>Name</b>	Shintaro Ishizuka

<b>1. Country/location of visit</b>
Shodoshima island
<b>2. Research project</b>
Research: Male mating strategy in Japanese macaques in Shodoshima island
<b>3. Date (departing from/returning to Japan)</b>
2017.9.8-12.30 (114days)
<b>4. Main host researcher and affiliation</b>
Choshikei-Shizendoubutsuen-Osarunokuni
<b>5. Progress and results of your research/activity</b> (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>For a better understanding of group-living animals, it is necessary to understand male reproductive strategies. In the species forming multi-male groups, there is the dominance relationships among males. In female-philopatric species, males usually leave after the maturity and stay outside groups for some years. Therefore, males can be classified into “troop-males” or “non-troop-males”. To clarify the mating tactics of males with different social status, I conducted the field research over 3 months.</p> <p>Study subjects were two troops ranging in the area of the monkey part, Choshikei. I conducted the focal-animal sampling for one male on each day and recorded social behaviors and the number of individuals within proximity. Dominance relationships among males has been clear. I observed about 30 hours for each troop male and about 20 hours for each non-troop male. And in order analyze the paternity of offspring which will be born in next spring, we collected DNAs from subject males and females of which copulations were observed. After analyzing the paternity of those offspring, I am planning to announce the results.</p> <p>As another topic of my research, I focused on monkey rest clusters. Coldness could lead to be the stress for animals. Because stress is harmful for animal health, understanding the strategies of animals to deal with coldness is important. Monkeys in Shodosima island are unique in that they form extremely large rest clusters when it is cold. However, whether extremely large clusters may be effective to avoid the coldness is still unclear. So I compared the warmness between large clusters and small clusters. I should finish the analysis for those data as soon as possible, and if required, I would like to collect additional data in this winter.</p> <p>At first, I focused on the tolerance of monkeys in Shodoshima island. However, because I have not observed monkeys in the other population in detail, this question is still unclear. Although I would like to observe them, I have still many questions about monkeys in Shodoshima. So I would like to continue the field research for them.</p>

<b>6. Others</b>
This program was supported by PWS Leading Program. I would like to appreciate this program, all stuff of Choshikei-Shizendoubutsuen-Osarunokuni, and Dr. K. Watanabe.