

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.)

2016. 5, 19

Affiliation/Position	Wildlife Research Center/M1
Name	Anna KAWAKITA

1. Country/location of visit
Koshima Island, Miyazaki Prefecture
2. Research project
Koshima Field Science Course
3. Date (departing from/returning to Japan)
2016. 5. 5 – 2016. 5. 11 (7days)
4. Main host researcher and affiliation
Mr. Takafumi SUZUMURA at Koshima Field Station
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>The first aim of my study was to investigate how the Japanese macaques (<i>Macaca fuscata</i>) on Koshima Island use their cheek pouches and hands. However, because they didn't use their cheek pouches so much, this time I focused only on the usage of their hands.</p> <p>Previously, Mangalam et al. (2014) showed the laterality in hand and cheek pouch usage by feeding bananas to bonnet macaques in India. In this report, the bonnet macaques preferentially used one hand (right/ left) to pick up the bananas lying on the ground, which was corresponding to the usage of cheek pouch. They filled the 'preferred' cheek pouch first, then the other.</p> <p>In current study, I fed some pieces of carrot to the Japanese macaques based on the calorie calculation. The examinations were conducted 3 times; in the morning on 6th May, and in the morning and the afternoon of 7th May, and the carrots were fed 4, 8, and 3 pieces, respectively. The experiments were recorded by a video camera and later the behaviors were analyzed in <u>Kaba</u> (α-male, born in 1995), <u>Tabu</u> (born in 2014), and <u>Yashi</u> (born in 1996). Carrot is not usually fed to the monkeys at Koshima, so it was novel food for them. The following behaviors were observed when they saw carrots at first: washing in the fresh water, smelling, rubbing with their hands or rocks, and eating (Fig.1). The Japanese macaque at Koshima is famous for washing sweet potato in the sea, and it is explained as for removing dirt or for making them salty. This time they did it with the fresh water river, not in the sea, suggesting that it was not for making carrots salty but just for removing mud. Their behavior of washing sweet potato on Koshima Island is said as culture. In this experiment, I could see the <u>Tabu</u>'s washing, 1 year-old female. She showed the sign of cultural behavior at an early stage of development. Although the number of analyzed monkey was small, I could recognize the existence of their 'preferred' hand; <u>Kaba</u> used the both of hands, <u>Tabu</u> mainly used her left hand, and <u>Yashi</u> mostly used her right hand (Fig.2).</p>

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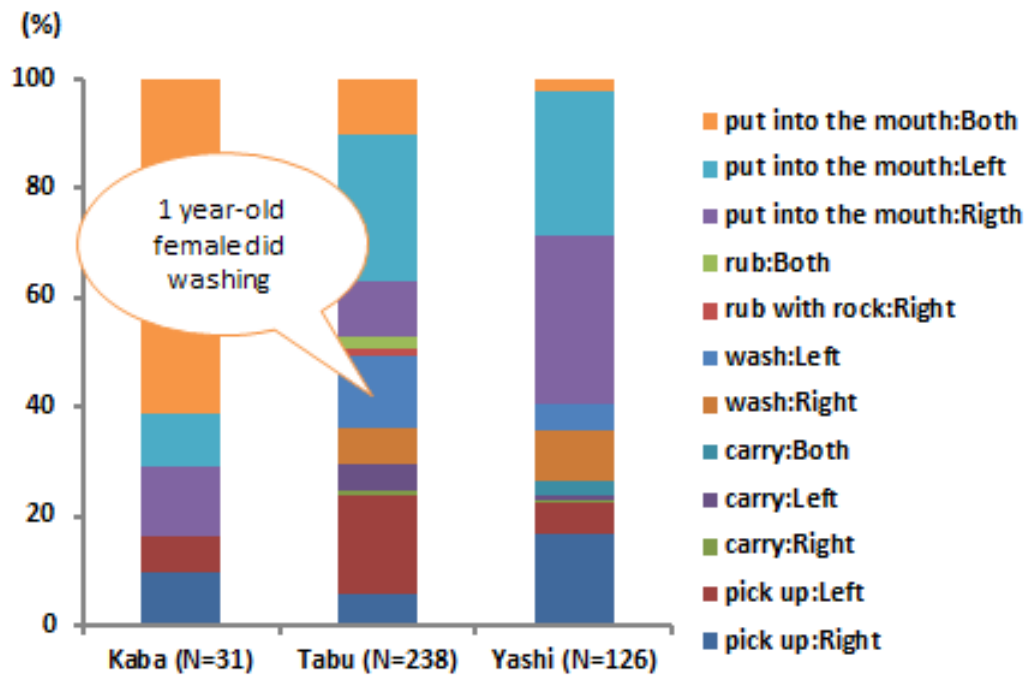


Fig.1. Usage of their hands when eating carrots

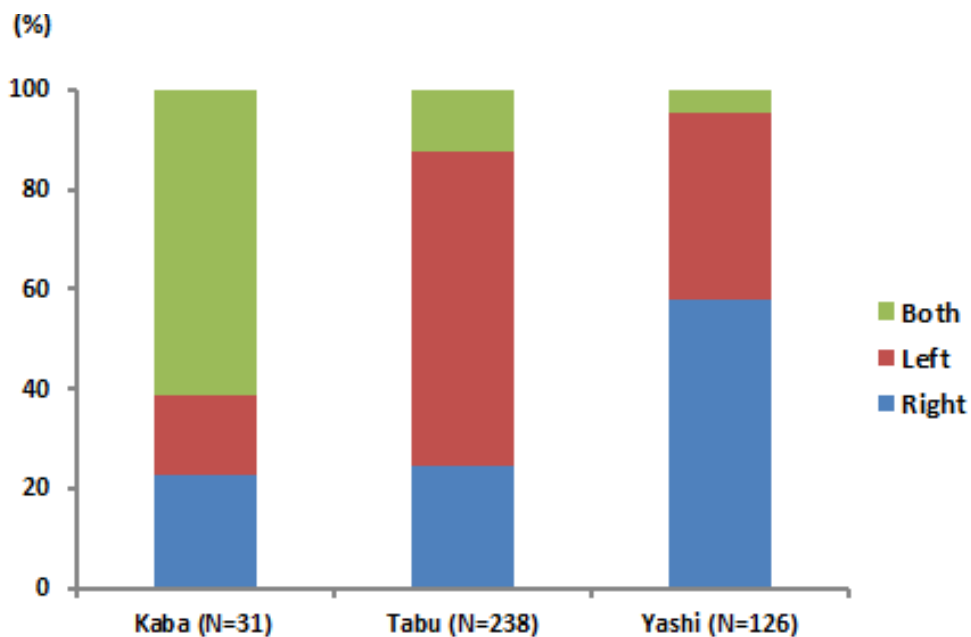


Fig.2. Which hand do they use mainly?

6. Others

I really appreciate a PWS support, Mr. Suzumura, Mr. Sugiura, and Mr. Nakamura.