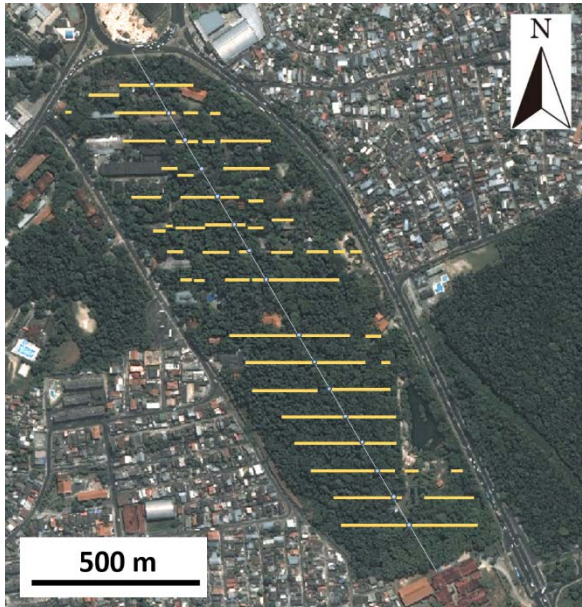


Research Activity Report
Supported by “Leading Graduate Program in Primatology and Wildlife Science”
 (Please be sure to submit this report after the trip that supported by PWS.)

2018. 9. 2

Affiliation/Position	Primate Research Institute /D2
Name	Makiko Take

1. Country/location of visit
Brasil, Manaus
2. Research project
Development of feeding behavior in Golden-faced saki (<i>Pithecia Chrysocephala</i>)
3. Date (departing from/returning to Japan)
2018. 05. 23 – 2018. 08. 22 (89 days)
4. Main host researcher and affiliation
Dr. Wilson Spironello, INPA
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>I used this opportunity to conduct following tasks as preparations before starting my actual data collection in October 2018.</p> <p><u>Transect setting and vegetation survey</u></p> <p>In order to investigate the fruit availability, I made 16 transects of 5 m wide (mean length was 175 m) with 50 m intervals (Figure 1). I tagged every tree with >5 cm diameter at breast height (DBH) within the transects. The total length of the transects was 2803 m. 1809 trees were tagged, and 223 species of 158 genera from 62 families of plants were recorded.</p> <p>In my study site (= campus of INPA), there are many buildings and paved roads in the north half, and the south half is covered by relatively “natural” secondary forest. North half is the home range of Group A of saki, and the south half is the home range of Group B.</p> <p>Comparing the result of this vegetation survey between those two areas, it became clear that the density of trees is higher in the north half. On the other hand, the species diversity (Shannon-Wiener Index) was lower in the north half. It will be interesting to see how this habitat difference affects the feeding ecology of two groups of saki.</p>

<p>Figure 1. Map of the transects (yellow line). Some transects were segmented because of the buildings or the roads.</p>

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Pilot filed observation

In order to make sure if the planned observation methods would work well, I followed sakis for 23 days (159 hours). At first, I supposed to use 1-hour focal animal sampling method. However, the visibility was not enough and it was quite difficult to collect reliable data by this sampling method. I changed my mind to use scan sampling method at every 10 min.

I also tried to collect DNA samples from feces and urines in order to conduct kin-ship analysis. 17 samples from 10 individuals were collected (8/8 individuals of Group A and 2/10 individuals of Group B). Although the sample collection was relatively difficult in Group B because of the dense forest, it will be possible to collect all individual’s sample after several months of field work.

During the field observation, I also tried some new methodologies for me: filmed the feeding behavior by hand-held video camera, recorded the food transfer behavior, and recorded the individual proximity. It was a good opportunity to get used not only to collect those data but also to analyze them.

Meetings

Thanks to the help of my Brazilian supervisors (Dr. Wilson Spironello and Dr. Adrian Barnett), I found the laboratories where I can order DNA analysis (Lab of Dr. Izeni Farias, UFAM) and plant chemical analysis (Lab of Dr. Hector Koolen, UFAM), respectively. For nutritional analysis, I am still in the process of searching and negotiating. I am planning to confirm it before the next visit.

I also had a meeting with Mr. Anselmo d’Affonseca, a veterinarian who has a responsibility in the provisioning to monkeys in INPA. To reduce the impact of the provisioning on my study as long as possible, I need to control the time, the amount, and the menu of provisioning properly. He allowed me to conduct the provisioning by myself from the next October. It was a great progress for my study, although it makes me get up very early morning.

Measuring of monkey’s body weight

I briefly tried to measure monkey’s body weight without capturing using the provisioning tables and camera traps. I put foods into the box and put the box on the scale (Figure 2). I succeeded to make monkeys jump on to the box, but there are some problems that I need to solve before using this system for actual data collection. First, I need to make the box more stable otherwise it easily falls down from the scale. Second, I need to change the setting of the camera trap in order to read the scale clearly from the video.

Figure 2(right). Trial to measure the body weight of monkeys



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Figure 3. A mother and a female juvenile of golden-faced saki



Figure 3. Sometimes the juveniles play on the ground

6. Others

I really appreciate to Dr. Wilson Spironello, Dr. Adrian Barnett, and the other Brazilian friends for their help during this visit. I also would like to thank to PWS program for the financial support.