

**Research Activity Report**  
**Supported by JSPS Program for Leading Graduate Schools**  
**“Leading Graduate Program in Primatology and Wildlife Science”**

2014. 3, 31	
<b>Affiliation/Position</b>	PhD student (D2), Primate Research Institute, Kyoto University
<b>Name</b>	Takashi Hayakawa

<b>1. Country/location of visit</b>
Danum Valley, Malaysia
<b>2. Research project</b>
Ecological observation of wild Bornean orangutans and other animals/plants of Danum Valley
<b>3. Date (departing from/returning to Japan)</b>
2014.2.21 – 2014.3.1 (9 days)
<b>4. Main host researcher and affiliation</b>
Borneo Rainforest Lodge
<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>My research theme of the PhD course is genetics and genomics of wild chimpanzees, especially focusing on the geographical difference between chimpanzees of eastern and western tropical Africa. There are also geographically isolated populations of great apes in tropical Asia, i.e., the 2 species of orangutans. Bornean orangutans (<i>Pongo pygmaeus</i>) and Sumatran orangutans (<i>Pongo abelii</i>) are distributed in 2 large island of Sunda, Borneo and Sumatra, respectively. I believe that my study will be developed if I investigate wild orangutans and compare the differentiation patterns of orangutan species with those of chimpanzee subspecies. Here I had an opportunity to visit Danum Valley and observe wild Bornean orangutans.</p> <p>I stayed at Borneo Rainforest Lodge with Dr. Kawakami and other members of Kyoto University from February 22<sup>nd</sup> to 28<sup>th</sup> to observe ecology of Danum Valley. Danum Valley is a study site for human-habituated wild orangutans, conducted by Japanese researchers. We observed wild Bornean orangutans from 22<sup>nd</sup> to 26<sup>th</sup>, and enjoyed further trekking in the mountain and river of Dunum Valley on 27<sup>th</sup>. Thanks to Ms. Renata, who is currently studying orangutans of Danum Valley, we could readily observe orangutans. Finally, a total of 11 individuals, including mothers/infants, young females, and unflanged males, were observed. Unfortunately, we did not encounter flanged males. I hope that I will encounter flanged males in the next opportunity to visit the Borneo island. I compared orangutans with chimpanzees that I knew, and I realized many ecological differences between them, such as resting time, arboreal utilization patterns, locomotion, and vocal communication. These findings will enable me to a further study of great apes.</p>

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**Photo 1** A young female, Amy. **Left: Moving; Middle: Feeding; Right: Resting.**



**Photo 2** A unflanged male, Johnny.

I also enjoyed opportunities to observe a variety of animals and plants. For example, I found 4 primates in addition to orangutans. I thought that it is important to consider the interaction with such diversified animals and plants when we study wild orangutans.



**Photo 3** Primates of Danum Valley. From the left, Bornean gibbon (*Hylobates muelleri*), red leaf monkey (*Presbytis rubicunda*), crab-eating macaque (*Macaca fascicularis*), and southern pig-tailed macaque (*Macaca nemestrina*).

## 6. Others

I thank professors and administrators of the PWS Leading Graduate Program for supporting my study in Danum Valley, Dr. Noko Kuze for advising about observation of wild orangutans of Danum Valley, and Ms. Renata Mendonça and local assistants for conducting the fieldwork.