Research Activity Report Supported by "Leading Graduate Program in Primatology and Wildlife Science"

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	2017. 01, 11
Affiliation/Position	Primate Research Institute / D2
Name	Morgane Allanic

1. Country/location of visit

Bossou, Guinea

2. Research project

Grooming patterns and social dynamics in wild chimpanzees

3. Date (departing from/returning to Japan)

2016. 08. 31 – 2016. 12. 21 (113 days)

4. Main host researcher and affiliation

Gen Yamakoshi – Graduate School of Asian and African Area Studies, Kyoto University

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.

From September 3rd to December 19th, 2016, I was in Bossou to conduct my fieldwork on wild chimpanzees. For my PhD I am collecting data on grooming and social dynamics on both chimpanzees and bonobos from both captivity and wild environments. I already collected data for captive individuals, so this trip aimed at collecting data on wild chimpanzees.

The village of Bossou is located in the South of the Republic of Guinea, not far from the border of Liberia and Ivory Coast. The long term research on the wild chimpanzees of Bossou started in 1976 with a group of 22 individuals. One particularity of the Bossou community is the coexistence between humans and chimpanzees. The home range of the chimpanzees overlap with the village of Bossou, thus chimpanzees and humans interact frequently. The chimpanzee home range is composed by several hills, and to go from one hill to another, chimpanzees need to cross roads that are often used by humans. The chimpanzees frequently steal food from the human fields eating corn, papayas, bananas, cacao, oranges, etc. However, humans tolerate them a lot. Villagers believe that the chimpanzees are the reincarnation of their ancestors, and thus show respect and tolerance towards the chimpanzees. Bossou chimpanzees are thus very well habituated to humans, and they are very isolated as well due to their close proximity to humans. Since 1976, there has been no record of females immigrating into the population. It is difficult for non-habituated females born in other communities to immigrate into the Bossou community because of the close proximity to humans. Today, the group is composed by only eight individuals: two adult males (36 and 19 years old), one infant male (5 years old), and five females with four over 40 years old and one who is 19 years old. The Bossou population is decreasing and endangered. To conserve and save the Bossou chimpanzees, the Green Corridor Project was created in 1997. The village of Bossou is separated by around ten kilometers of savannah from the Nimba mountains where chimpanzees have been observed. The project is thus to plant trees in the savannah area to connect the forests of Bossou to the forests of Nimba and thus increase the opportunities for the chimpanzees to travel back and forth between the two areas. Around ten percent of the corridor is finished and the chimpanzees have been observed walking through the corridor few times through the camera traps. I had the opportunity to visit the Green Corridor in September and could see that it is a very hard work and that the guides are putting a lot of efforts on this project.

For my data collect, I followed the chimpanzees from 06:30 in the morning till they make their night nest. In total, I followed them during 58 days for a total of around 397 hours.

I conducted 20-minute-focal-animal sampling for the eight individuals recording data on their activity budget, social proximity, and social interactions. On average, I conducted 38 focals/individuals (min=23; max=42), equivalent on average to 820 minutes/individual (min=460; max=840).

In parallel, I was video recording all their social interactions. For the full dyadic grooming interactions (involving only two individuals from the beginning till the end, and where the full interaction is visible on the camera), I could collect:

- Three male-male dyads: 41, 5, and 5 grooming interactions.
- Fourteen male-female dyads: 24, 24, 17, 14, 14, 12, 11, 7, 6, 5, 5, 3, 3, 2, and 1 grooming interactions.

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- Four female-female dyads: 1, 2, 2, and 3 grooming interactions. The data collect went well. I just wish I could collect more video records of the grooming between the females. It was kind of expected since the female relationship in chimpanzees is not strong but I wish I could collect more data. I am back in Japan now and need now to code the videos.

In addition to the research, I experienced for the first time what is like to manage a fieldsite. Being most of the time the only researcher working in Bossou, I was in charge of managing the guides, the schedule and the salaries. It was a very interesting experience, the guides took their work very seriously so I really appreciate working with them.

At the very end of my trip, I went climbing the Nimba Moutain with Morimura-san. Nimba Mountains with Bossou included are a World Natural Heritage site and are situated on the border between Guinea, Liberia, and Ivory Coast. We started our two days – one night trip from Seringbara, a village which is located around one hour by walk from Bossou. We climbed the Mount Richard-Molard who is a mountain along the border of Guinea and Ivory Coast elevated at 1,752 meters. The experience was great and the view even more amazing. It was nice to observe Bossou and the other villages from this point of view.

Overall, it was a great experience for both the research and the life experience parts. I was culturally immersed in the Guinean lifestyle and, thanks to the guides, I could learn a lot about the culture and traditions here in Bossou. I am very thankful I had the opportunity to study the Bossou chimpanzees and I really hope the Green Corridor project will be fruitful and save the Bossou community.

I would like to thank Profs Yamakoshi and Matsuzawa to allow me to conduct my study in Bossou, Ohashi-san and Morimura-san for helping me in Bossou, the guides: Jules, Boniface, Gouanou, Henry, Vincent and Lawe for their guidance and knowledge on chimpanzees and Dagouka for always helping me at the fieldsite. And finally, the Leading Graduate Program in Primatology and Wildlife Science for supporting this trip.



Fanle and her son Fanwaa crossing the road, going from Mont Gban to Mont Guein.

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Foaf and Fanwaa playing together.



From the left to right: Fanwaa (Fanle's son), Fanle, and Foaf



Fanle in her nest

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Jire eating resin from the tree.



Group photo at the summit of Mount Richar-Molard



Mont Richard-Molard, on the left: Ivory Coast, on the right: Guinea

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Group photo of the guides and the guardian. From left to right: Jules, Dagouka, Lawe, Vincent, Gouanou, Henry, and Boniface.

6. Others