	2018. 02. 03
Affiliation/Position	Wildlife Research Center (D1)
Name	Kristin Havercamp

1. Country/location of visit

London, Bristol & Oxford, UK / Conakry & Bossou, Guinea

2. Research project

Scientific conferences (attendance and presentation) & chimpanzee observation and fieldwork at Bossou

3. Date (departing from/returning to Japan)

2018. 11. 29 – 2019. 01. 22 (55 days)

4. Main host researcher and affiliation

Primate Society of Great Britain; Association for the Study of Animal Behaviour; Dora Biro - Oxford University;

Matsuzawa-sensei and Morimura-sensei - 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.

The purposes of this trip were many, 1) to attend the Primate Society of Great Britain (PSGB) winter meeting conference held by the Zoological Society of Bristol, UK, 2) to attend and present a poster at the winter meeting conference of the Association for the Study of Animal Behaviour (ASAB) held by the Zoological Society of London, UK, 3) to meet with Prof Dora Biro and Dan Schofield at Oxford University and 4) to observe chimpanzees in the wild for the very first time and conduct fieldwork in Bossou, Guinea.

Hosted by the Zoological Society of Bristol and Bristol Zoo and Gardens, the PSGB winter meeting theme this year was "Primates in Peril: Conserving the world's most threatened primates". I attended the conference from 4-5 Dec 2018; it was my first time in Bristol despite previously living in the UK for many years. This conference was unique in comparison to past PSGB meetings as it focused specifically on wild primates and conservation. The decision making processes and goals of the "World's 25 Most Endangered Primates" list was discussed openly across multiple talks, as it has been a critical resource for funding acquisition and public outreach for many primatologists working in the wild. The talk which stood out as most interesting to me was by Prof Serge Wich, titled "A brief overview of threats to orangutans with a focus on the Tapanuli orangutan". Although I have been taught about the pressure of hunting on wild primates, I was surprised to hear that it is one of the two main drivers behind their decline (apart from habitat loss). During the lunch break on the first day, I was also able to visit the Bristol Zoo. My impression was that many of the enclosures seem quite small and outdated, however some appeared to be renovated. During a break in the conference, to my surprise I met Megan again (an Oxford University PhD student), who had participated in the Yakushima Field Course in Japan this past spring.

Held from Dec 6-7 at the Zoological Society of London in Regent's Park, the ASAB winter meeting theme was "Behavioural Biology in Animal Welfare Science". Unlike the PSGB meeting, this conference focused on captive animal welfare, spanning from primates to farm animals such as pigs and chickens. There were multiple interesting talks and posters, but I left feeling very especially inspired by the absolutely brilliant and interesting talk of Georgia Mason (a Plenary speaker), titled "Using phylogenetic comparative methods in animal welfare research". I learned about phylogenetic methods during my Master's course at UCL, but I never knew such methods were applied in the study of animal welfare. She gave examples of her previous work which included examining stereotypic behaviors of animals in zoos and discovering that the size of an animal's territory in the wild can predict welfare problems in captivity such as pacing. One point of criticism I have about the conference is that many of the accepted speakers discussed their research which actually imposed negative stimuli/experiences/etc. onto animals to study their "welfare". Personally, I find it difficult to hear about this type of research as I do not agree with imposing harm onto animals (or even a single animal, of any species) to supposedly better understand their wellbeing (and also, to supposedly improve their wellbeing in the future from this knowledge). I was able to present a poster titled "Monitoring sleep in captive chimpanzees to enhance welfare" which allowed me to discuss a side project of my ongoing study at Kumamoto Sanctuary to study

chimpanzee sleep. Many people visited my poster and told me it was interesting, and also commented that KS staff and I are making a positive impact on the welfare of chimpanzees living there, so I was happy to hear this. Overall, I feel grateful I was able to attend both conferences, as they complemented each other well by balancing the research I heard about wild and captive animal conservation and welfare.

In addition to the two conferences, while in the UK I was able to visit Prof Dora Biro at Oxford University. Prof Dora and I discussed about Bossou and our future plans with the archive. I also met with Dan Schofield, a PhD student at Oxford University, who works on the video archive. We last met in Inuyama when I assisted him with archiving, and we discussed his ongoing work and my upcoming plans with the archive.

I left the UK for Conakry, Guinea with the goal to observe and study wild chimpanzees of the Bossou community. In total, I was in Guinea for 36 days with both Matsuzawa-sensei and Morimura-sensei. This opportunity was very special for me, for multiple reasons. Firstly, I was able to observe chimpanzees in the wild for the first time. The Bossou community is currently made up of just seven individuals, Fanwaa, Fanle, Foaf, Fana, Jeje, Jire and Yo. Every day, except Wednesday (market day) we entered the forest to follow the chimpanzees, although due to occasional ill health I missed a few days here and there. Four "monts" or hills surround the KUPRI / IREB research station where we live in the village, Mont Gban, Mont Guein, Mont Bouton and Mont Ueyaton - this, along with the surrounding environment including the expanding Green Corridor which aims to reach the nearby Nimba Mountains, is where the Bossou chimpanzees live. We often found six chimpanzees foraging, moving and resting together - all except Yo - however, some days we were able to see Yo when she had joined the group (or maybe the group "joined her"). One day we were able to follow Yo for the entire day, after she split off from the rest of the group members. Otherwise, it can be difficult to find Yo if she is separated from the group, which often seems to be the case. Yo is one of the oldest members of the Bossou community, estimated to be 57 years of age, which seemed to be visible from her small/frail body, overall slow movements and travelling speed and apparent poor vision (the guides pointed out that while she can still hear well, she may not be able to see very well). As my PhD topic is chimpanzee aging, I found it very interesting to observe Yo because after observing many old captive individuals, I begin to understand that there is a huge variety in how chimpanzees age depending on the individual. While Fana and Jire are also estimated to be very old at 62 and 60 years, respectively, they do not appear as frail, they do not move particularly slowly and they also remain closely socially integrated with others on a daily basis. I sometimes thought about why Yo often isolates herself and wondered whether it might be because of her symptoms of old age, no longer having any kin relationships to the group, and/or if she is simply fed up with Fanwaa's constant and sometimes aggressive play invitations (or maybe just harassment!).

On January 10th, I was able to observe Yo from 8:40 until 16:45 (8h 5m or 485m). During this time, I conducted focal behaviour sampling every 5 minutes. During this period, Yo moved a total of 55m, rested 120m and ate for 310m. Most of this time was spent in a single Ficus tree where she continuously fed and rested. Although we did not observe her travelling far, her particularly slow movements may explain why she travelled for 55 minutes.

Over the past year I have assisted with the Bossou Video Archive, a more than 30-year database of video recordings of the Bossou chimpanzees made by Matsuzawa-sensei and collaborators. From next year I plan to analyze footage from this archive, and so in addition to observing wild chimpanzees this trip provided me with the opportunity to visit the experimental nut-cracking salon in person. Although the chimpanzees did not visit it very many times during my stay as fruit was abundant elsewhere, I was able to record some videos of them eating the red fruit surrounding the palm tree nut and also nut cracking which I hope to add to the archive.

A second important aspect of my trip is that I was able to learn about Guinean, and specifically Bossou, culture, people and nature/landscape. In addition to this, I also learned about some of the history of Japanese researchers working here and collaborating with the local Manon people. I really enjoyed getting to know the five Bossou guides, Jilles, Boniface, Gouanou, Henry, and Vincent. We also spent time with Nimba and Seringbara staff and collaborators. Dauoga, the house guardian, was also excellent company during my stay and I learned so much from him. On December 31^{st} , New Years Eve, 18 of us travelled to walk to the top of Mont Nimba by sunrise on New Years Day. We camped one night below the highest peak, and on the first day of the new year we departed at 4am to be able to celebrate a Japanese tradition $30 \pm 0 \pm 0 = 0$ (hatsuhinode), where we enjoy the first sunrise of the year from the highest point. During this hiking trip I was able to appreciate the beautiful Nimba landscapes, one where other communities of chimpanzees live. We did not see chimpanzees living in Nimba (also, they are not habituated to humans), but we once heard and also saw signs of their presence such as fresh feces. Overall, I came away from this trip with a general feeling of astonishment by how much professors working here are able to manage, in Japan, at the Bossou field site, and elsewhere. (Please see photos on the following pages.)





PSGB Winter Meeting held at the Bristol Zoo.



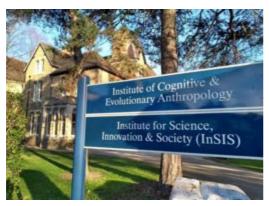


Views during my walk to the conference in Bristol.





Behavioural Biology in Animal Welfare Science meeting held at the Zoological Society London.





A visit to the Oxford University Institute of Cognitive & Evolutionary Anthropology.





Desert views from the airplane.

Our drivers must be Obama fans...





Matsuzawa-sensei gives a presentation at Conakry University.







A wadge made from rice stalks (chewed on by a chimpanzee), a leaf sponge used by Jeje and dried chimpanzee feces.



Arrival to the field station in Bossou!



A sort of weapon or toy thrown at us by Fanwaa.



A sliver of the moon visible above Mont Gban.





Fanwaa's feces.





A freshly bitten fruit by a chimpanzee.

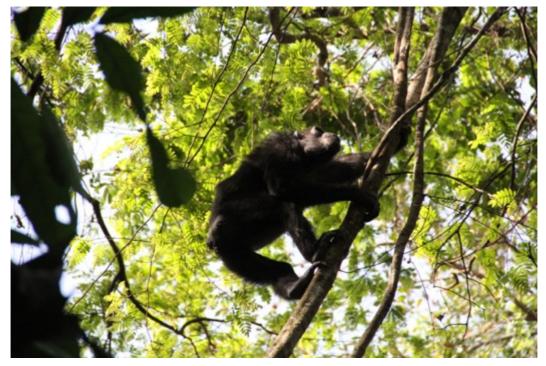
Our precious stock of fresh pineapples and papaya.







Enjoying time with guides, collaborators and friends.



Yo, one of the old females of Bossou, moving slowly up the tree.



Fanwaa, the youngest (and only non-adult) chimpanzee at Bossou.



Jeje sits on a small path which the locals use to walk to their farms/plantations. Fanle observing us.





Boniface showing the new hangars which were built in the Green Corridor for World Chimpanzee Day 2018.



Hiking up Mount Nimba to celebrate the new year.





Walking in the first sunrise of 2019 on Mount Nimba.

6. Others

I am forever thankful to PWS for providing me with the opportunity to visit Guinea, particularly Bossou, as well as the UK. Many, many thank-yous to Matsuzawa-sensei and Morimura-sensei for sharing their interesting experiences and knowledge with me along the way – I learned so much! Also to Hirata-sensei for allowing me the wonderful opportunity.