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

	2016. 11, 18
Affiliation/Position	Primate Research Institute/D1
Name	Josue Alejandro Pastrana

1. Country/location of visit

Kumamoto, Japan

2. Research project

Animal Welfare Course at the Kumamoto Sanctuary. Environment Enrichment in chimpanzees and bonobos.

3. Date (departing from/returning to Japan)

2016. 11. 14 – 2016. 11. 17 (04 days)

4. Main host researcher and affiliation

Dr. Hirata, Dr. Yamanashi, Dr. Morimura

5. Progress and results of your research/activity

For our Animal Welfare Course we had the opportunity to visit the Kumamoto Sanctuary located close to Uto in the Kumamoto prefecture facing Nagasaki across the sea. This peninsula in Kumamoto has beautiful mountains and cliff leading to the shore, it is surrounded by much smaller islands with spectacular sunsets, and gorgeous natural resources surrounding it. The Kumamoto sanctuary provides housing for apes, both bonobos and chimpanzees, from all over the world from various different backgrounds. These animals are housed in very nice enclosures where the animals' species specific behaviors have been carefully taken into account and an extensive daily environmental enrichment is also provided for them. On our first day we had a tour of the facility and I was amazed watching apes up so close, and learning about the individual differences between groups and group members. Moreover, I was very excited to meet the bonobos since I had not seen them up so close before, and though I had seen chimpanzees many times and noted that bonobos look very similar, I was surprised how different they are not only in size, but in vocalizations and behaviors.

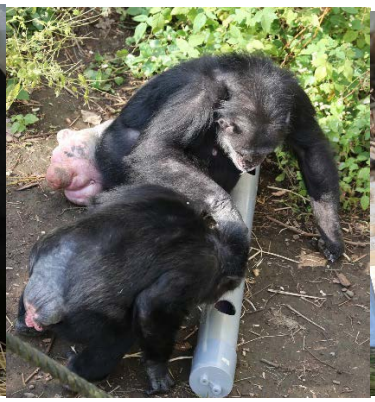
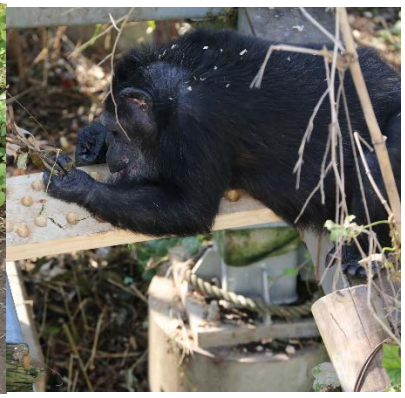
In our course, on top of learning about bonobos and chimpanzees, how the staff manages all the husbandry practices (fission-fusion), housing, feeding schedules, animal histories and their main goal of providing a safe haven to all their apes, we learned a lot about environment enrichment and how they provide different enrichment every day to all of their animals. To learn more about environmental enrichment, we were separated into groups and were given a challenge to make enrichment devices to two groups, a bonobo and a chimpanzee group. After an introductory course on the types of enrichment usually given to apes in captivity, we were given the freedom to think of new enrichment ideas and to build our own enrichment devices for each group. Our aim was to make devices that promoted natural behaviors, were safe to use, and that lasted the longest. After one day of getting to know both groups (habituate), learn the individual names, and practice how to take behavioral data, we constructed our own devices. After an inspection from the veterinary staff, husbandry staff and professors, we handed our devices to the staff so they could be placed inside the enclosures. On the first day, we saw the enrichment for chimpanzees and took data for an hour. It was such a wonderful thing to watch, that we all decided to keep watching them even more. The same thing happened the next day with the bonobo group. It was very interesting to note that the same enrichment that worked really well for chimpanzees did not necessarily work well for the bonobo groups. Indeed, this was not surprising since these two types of apes, although they look similar, have big behavioral and ecological differences. It is important that for improving enrichment and welfare for apes in captivity, it is crucial to learn more about what and how they spend their time in nature. It was very fulfilling for me personally, since I had worked with enrichment with macaques, to see how apes also enjoy and benefit from enrichment.

We also had the opportunity to learn about drones and their potential use for environmental enrichment. To promote species-specific behaviors, providing enrichment in higher arboreal locations using drones, does give apes an opportunity to express these behaviors of reaching in higher places where humans can't reach. I am looking forward to see it implemented more widely in the sanctuary in the future. And we also had a nice BBQ where we got to share our ideas with the staff and enjoy a good evening at the sanctuary.

It makes me proud being a student of an institution which has dedicated a lot of resources to improve the care and welfare of apes in captivity. I am thankful to all professors and staff from the PWS program, the sanctuary and Kyoto University for making this trip possible and I hope I get the opportunity to return in the near future.


(Above: our enrichment team and the set up in the chimpanzee enclosure)


(Above: preparing enrichment devices for the bonobo and chimpanzee groups)

(Above:chimpanzees using our enrichment devices, the animal on the right cut a branch to use as a tool)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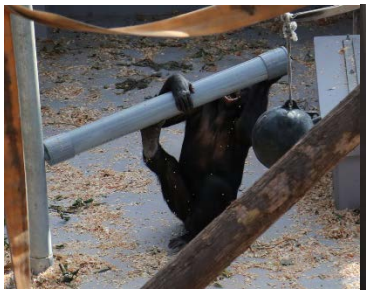
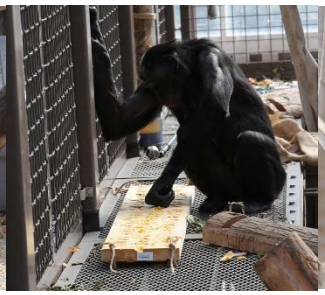
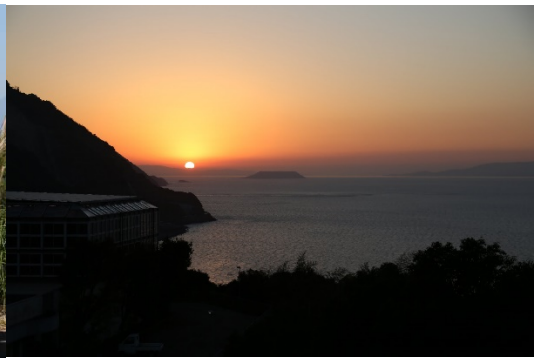
(Above: set up of enrichment in bonobo enclosure and some of the produce and scents such as cinnamon used)


(Above: bonobos using the enrichment devices we prepared)


(Above: taking behavioral data from our enrichment devices and learning about drones)


(Above: views and colleagues in our course)